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COLOR MONITOR

SERVICE MANUAL

CHASSIS NO. : CA-109

FACTORY MODEL: EB770G

MODEL: StudioWorks E700B (EB770G-EA)
StudioWorks E700S (EB770G-NA)
FLATRON E700S (EB770G-NA)
未来窗 E700S (EB770G-NA)

***( ) ID LABEL Model No.**

CAUTION

BEFORE SERVICING THE UNIT,
READ THE **SAFETY PRECAUTIONS** IN THIS MANUAL.

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SPECIFICATIONS

1. PICTURE TUBE

Size : 17 inch (FCDT)
Deflection Angle : 90°
Neck Diameter : 29.1 mm
Dot Pitch : 0.25 mm
Face Treatment : W-ARASC (Anti-Reflection and Anti-Static Coating),Anti-Glare
Low Radiation : TCO99, MPR-II

2. SIGNAL

2-1. Horizontal & Vertical Sync
1) Input Voltage Level : Low=0~1.2V, High=2.5~5.5V
2) Sync Polarity : Positive or Negative

2-2. Video Input Signal
1) Voltage Level : 0 ~ 0.7 Vp-p
a) Color 0, 0 : 0 Vp-p
b) Color 7, 0 : 0.467 Vp-p
c) Color 15, 0 : 0.7 Vp-p
2) Input Impedance : 75 Ω
3) Video Color : R, G, B Analog
4) Signal Format : Refer to the Timing Chart

2-3. Signal Connector
15-pin Connector (Attached)

2-4. Scanning Frequency
Horizontal : 30 ~ 70 kHz
Vertical : 50 ~ 160 Hz

3. POWER SUPPLY

3-1. Power Range
AC 100~240V (Free Voltage), 50/60Hz, 2.0A Max.

3-2. Power Consumption

MODE	H/V SYNC	POWER CONSUMPTION	LED COLOR
NORMAL (ON)	ON/ON	73 W	GREEN
STAND-BY	OFF/ON	less than 15 W	ORANGE
SUSPEND	ON/OFF	less than 15 W	
OFF	OFF/OFF	less than 5 W	ORANGE

4. DISPLAY AREA

4-1. Active Video Area :
• Max Image Size - 325.1 x 243.8 mm (12.80" x 9.60")
• Preset Image Size - 310 x 230 mm (12.20" x 9.06")
4-2. Display Color : Full Colors
4-3. Display Resolution : 1024 x 768 / 85Hz (Non-Interlace)
4-4. Video Bandwidth : 110 MHz

5. ENVIRONMENT

5-1. Operating Temperature: 0°C ~ 40°C (32°F ~ 104°F) (Ambient)
5-2. Relative Humidity : 10%~ 90% (Non-condensing)
5-3. Altitude : 5,000 m

6. DIMENSIONS (with TILT/SWIVEL)

Width : 400.0 mm (15.74 inch)
Depth : 424.0 mm (16.70 inch)
Height : 395.0 mm (15.55 inch)

7. WEIGHT (with TILT/SWIVEL)

Net Weight : 16.0 kg (35.28 lbs.)
Gross Weight : 18.9 kg (41.67 lbs.)

SAFETY PRECAUTIONS

SAFETY-RELATED COMPONENT WARNING!

There are special components used in this color monitor which are important for safety. ***These parts are marked ⚠ on the schematic diagram and the replacement parts list***. It is essential that these critical parts should be replaced with the manufacturer's specified parts to prevent X-radiation, shock, fire, or other hazards. Do not modify the original design without obtaining written permission from manufacturer or you will void the original parts and labor guarantee.

CAUTION: No modification of any circuit should be attempted.
Service work should be performed only after you are thoroughly familiar with all of the following safety checks and servicing guidelines.

SAFETY CHECK

Care should be taken while servicing this color monitor because of the high voltage used in the deflection circuits. These voltages are exposed in such areas as the associated flyback and yoke circuits.

FIRE & SHOCK HAZARD

An isolation transformer must be inserted between the color monitor and AC power line before servicing the chassis.

- In servicing, attention must be paid to the original lead dress specially in the high voltage circuit. If a short circuit is found, replace all parts which have been overheated as a result of the short circuit.
- All the protective devices must be reinstalled per the original design.
- Soldering must be inspected for the cold solder joints, frayed leads, damaged insulation, solder splashes, or the sharp points. Be sure to remove all foreign materials.

IMPLOSION PROTECTION

All used display tubes are equipped with an integral implosion protection system, but care should be taken to avoid damage and scratching during installation. Use only same type display tubes.

X-RADIATION

The only potential source of X-radiation is the picture tube. However, when the high voltage circuitry is operating properly there is no possibility of an X-radiation problem. The basic precaution which must be exercised is keep the high voltage at the factory recommended level; the normal high voltage is about 25.5kV in cross-hatch pattern at 68.68kHz. The following steps describe how to measure the high voltage and how to prevent X-radiation.

Note : It is important to use an accurate high voltage meter calibrated periodically.

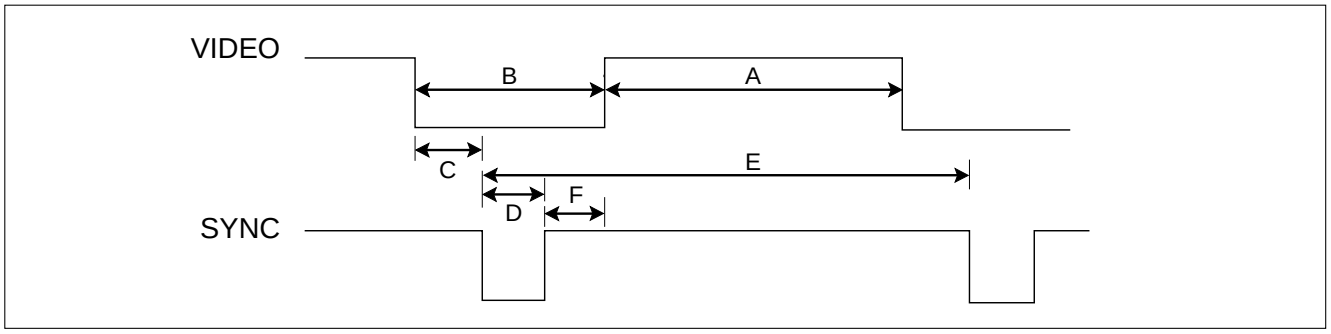
- To measure the high voltage, use a high impedance high voltage meter, connect (–) to chassis and (+) to the CDT anode cap.
- Set the brightness control to maximum point at full white pattern.
- Measure the high voltage. The high voltage meter should be indicated at the factory recommended level.
- If the meter indication exceeds the maximum level, immediate service is required to prevent the possibility of premature component failure.
- To prevent X-radiation possibility, it is essential to use the specified picture tube.

CAUTION:
Please use only a plastic screwdriver to protect yourself from shock hazard during service operation.

※ **WARNING**

The degaussing coil should be connected to pin-connector (P902) in Main Board, before monitor power on.

TIMING CHART



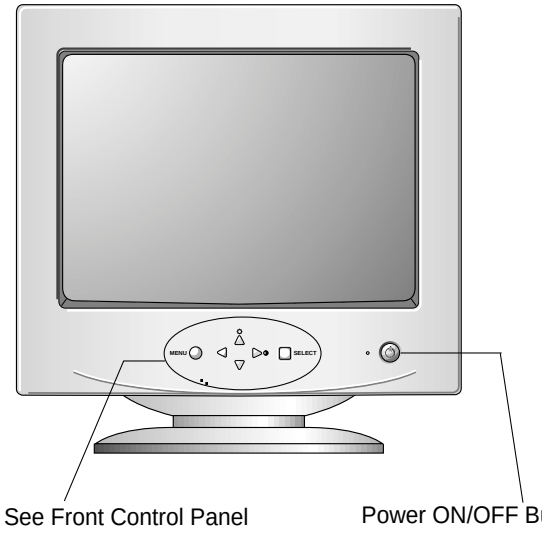
<< Dot Clock **(MHz),** Horizontal Frequency **(kHz)**, Vertical Frequency **(Hz)**, Horizontal etc... **(μs)**, Vertical etc... **(ms) >>**

Mode	H/V Sort	Sync Polarity	Frequency	Total Period (E)	Video Active Time (A)	Blanking Time (B)	Sync Duration (D)	Back Porch (F)	Front Porch (C)	Resolution
1	H	–	37.50	26.67	20.32	6.35	2.03	3.81	0.51	**640x480 75Hz**
	V	–	74.99	13.335	12.802	0.533	0.080	0.427	0.026	
2	H	+	46.88	21.33	16.16	5.17	1.62	3.23	0.32	**800x600 75Hz**
	V	+	75.01	13.331	12.798	0.533	0.064	0.448	0.021	
3	H	+	53.68	18.63	14.22	4.41	1.14	2.70	0.57	**800x600 85Hz**
	V	+	85.07	11.755	11.178	0.577	0.056	0.503	0.018	
4	H	+	68.677	14.561	10.836	3.725	1.016	2.201	0.508	**1024x768 85Hz**
	V	+	85.00	11.764	11.182	0.582	0.044	0.524	0.014	

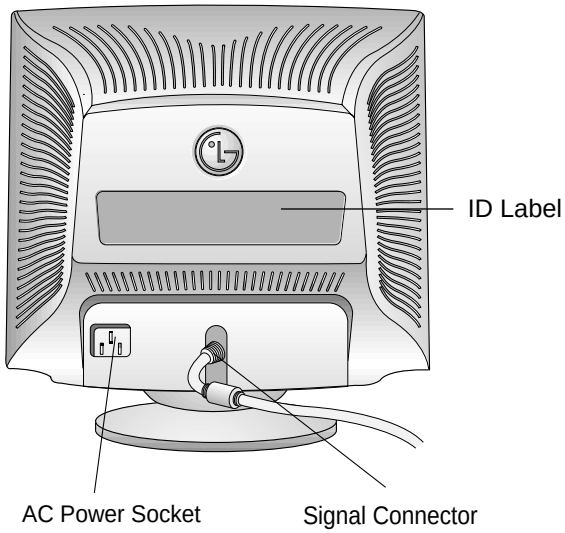
* Mode 1~Mode 4: Basic Mode

OPERATING INSTRUCTIONS

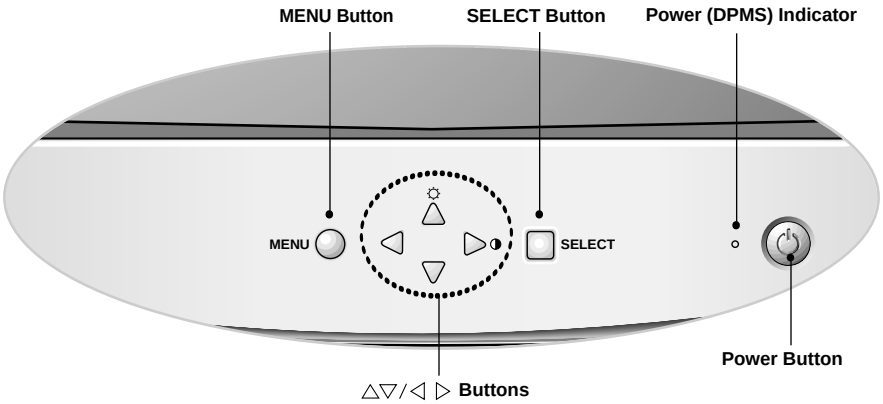
FRONT VIEW



REAR VIEW



Front Control Panel



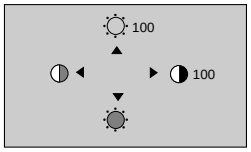
1. Power ON/OFF Button
Use this button to turn the monitor ON or OFF.

2. Power Indicator
This indicator lights up green when the monitor operates normally; in DPMS (Energy Saving) mode, - stand-by, suspend, or power off mode - its color changes to orange, and if abnormal or damaging circuit turns out orange blink.

3. Select Button
Use this button to enter a selection in the on screen display.

4. △▽/◁ ▷ Button
Use these buttons to choose or adjust items in the on screen display.

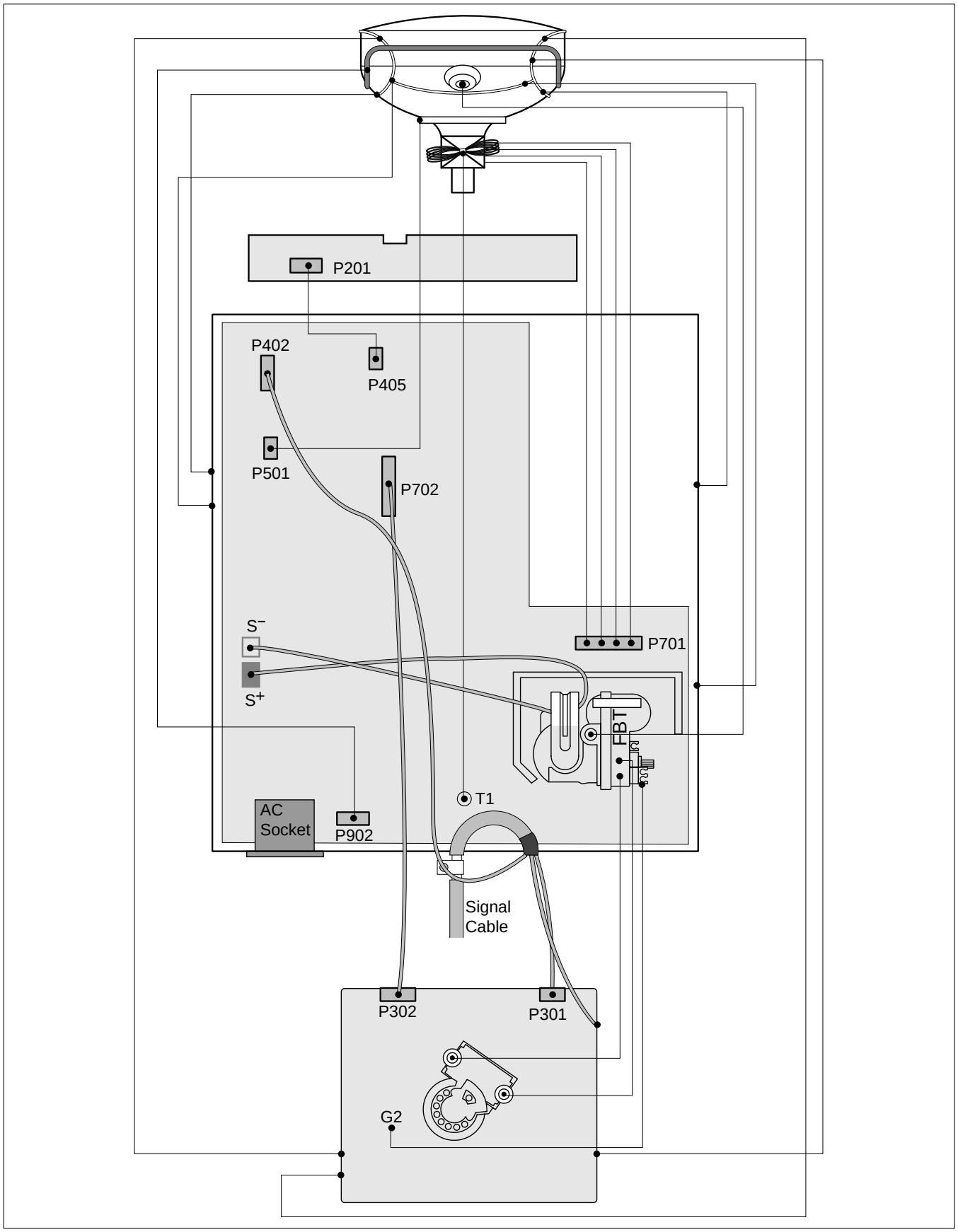
<Shortcut Keys>



- Brightness and Contrast can be adjusted directly without entering the On Screen Display (OSD) system.
  Press the △/▷ buttons to adjust the settings and then the **MENU button** to save all changes. The Brightness and Contrast functions are also available in the On Screen Display (OSD) menu.

5. MENU Button
Use this button to enter or exit the on screen display.

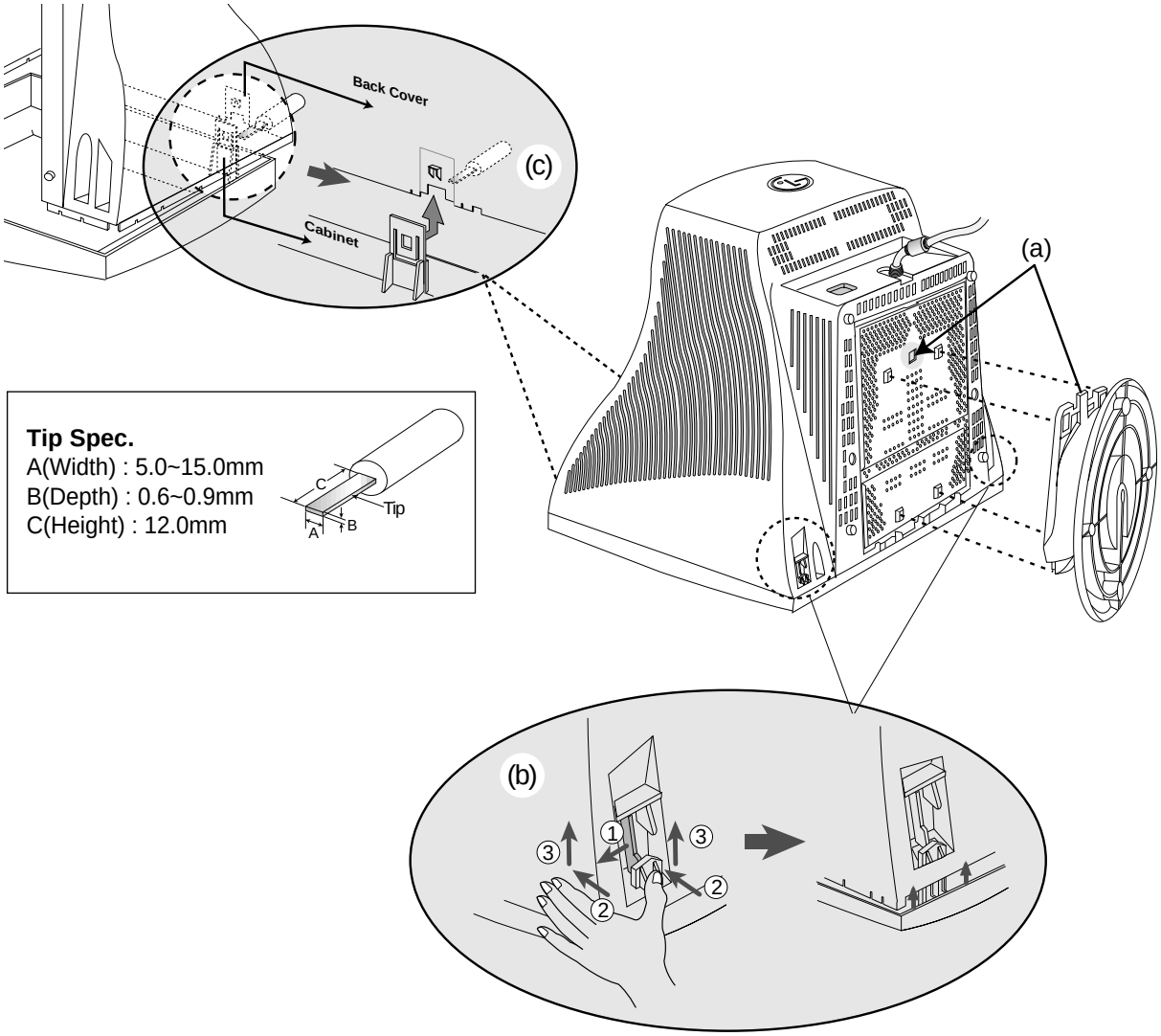
WIRING DIAGRAM



DISASSEMBLY

1. TILT/SWIVEL & BACK COVER REMOVAL

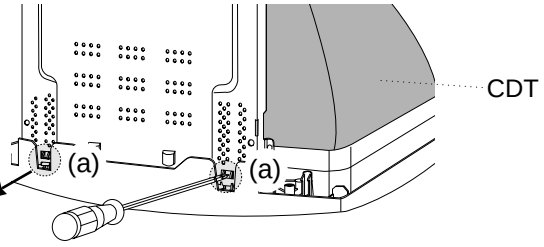
1) Set the monitor face downward.
2) Pull the latch (a), carefully remove the Tilt/Swivel by pulling it upward.
3) Pressing the latch (b), Back cover by pushing it upward.
4) Release the latch (c).
5) Slide the Back Cover away from the Front Cabinet of the monitor.



Tip Spec.
A(Width) : 5.0~15.0mm
B(Depth) : 0.6~0.9mm
C(Height) : 12.0mm

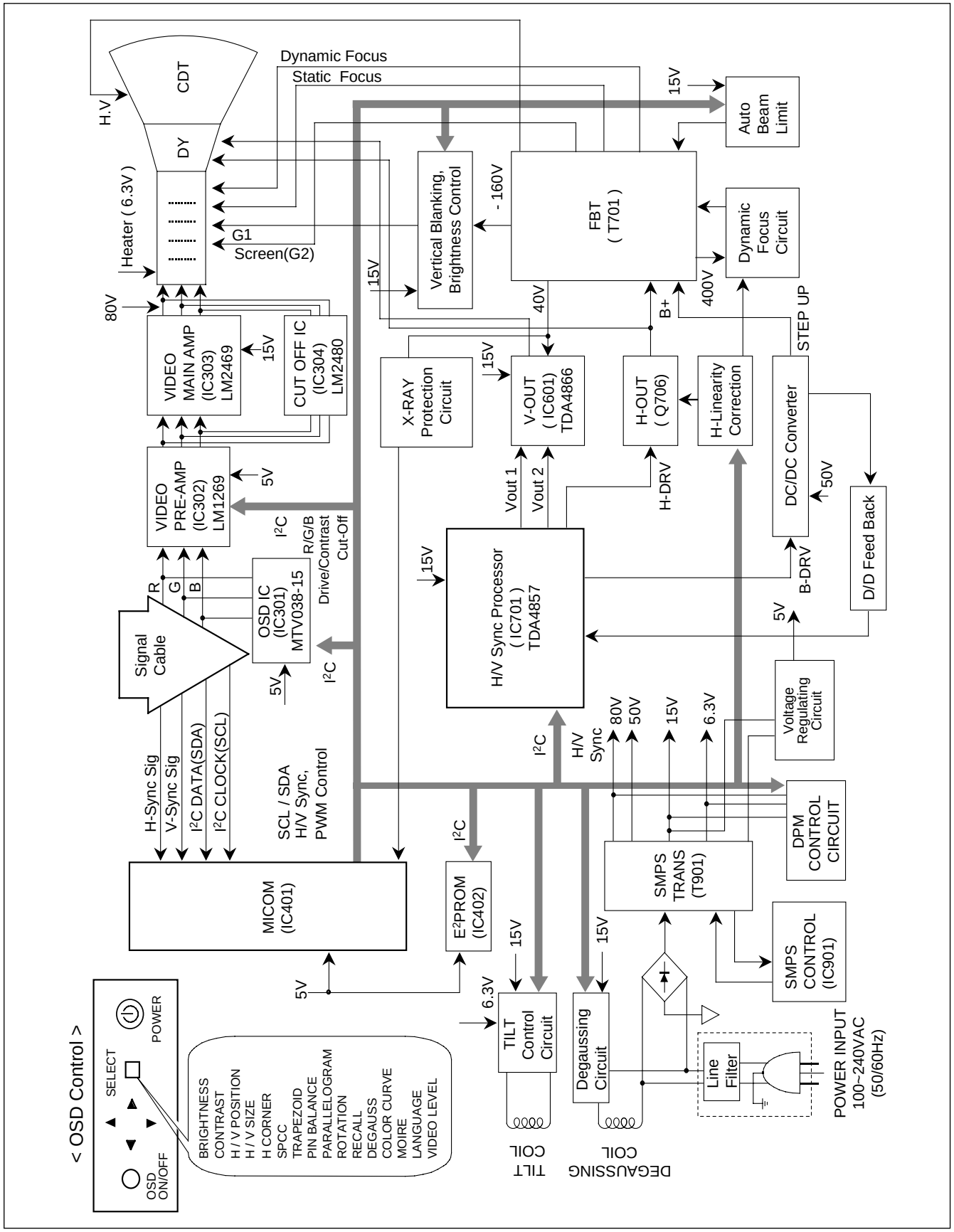
2. TOTAL CHASSIS ASSEMBLY REMOVAL

1) Set the monitor face downward.
2) Pressing the latch (a), Main Chassis by pushing it upward.



⚠ Please be careful, not to cut pattern.

BLOCK DIAGRAM



DESCRIPTION OF BLOCK DIAGRAM

1. Line Filter & Associated Circuit.
This is used for suppressing noise of power input line flowing into the monitor and/or some noise generated in this monitor flowing out through the power input line.
That is to say, this circuit prevents interference between the monitor and other electric appliances.

2. Degauss Circuit & Coil.
The degauss circuit consists of the degaussing coil, the PTC(Positive Temperature Coefficient) thermistor(TH901), and the relay(RL901). This circuit eliminates abnormal color of the screen automatically by degaussing the shadow mask in the CRT during turning on the power switch. When you need to degauss in using the monitor, select DEGAUSS on the OSD menu.

3. SMPS(Switching Mode Power Supply).
This circuit is working of 90~264V AC(50/60Hz).
The operation procedure is as follows:
1) AC input voltage is rectified and smoothed by the bridge diodes (D900) and the capacitor (C908).
2) The rectified voltage(DC) is applied to the primary coil of the transformer(T901).
3) The control IC(IC901) generates switching pulse to turn on and off the primary coil of the transformer (T901) repeatedly.
4) Depending on turn ratio of the transformer, the secondary voltages appear at the secondary coils of the transformer(T901).
5) These secondary voltages are rectified by each diode(D941, D942, D951, D961, D962, D971) and operate other circuit. (horizontal and vertical deflection, video amplifier, ...etc.)

4. X-ray Protection.
If the high voltage of the FBT reaches up to 29kV (abnormal state), IC401(MICOM) pin 35 Sensing from FBT directly.
Then MICOM control IC701 (Deflection controller) to stop Horizontal drive pulse and stop Horizontal Deflection.

5. Micom(Microprocessor) Circuit.
The operating procedure of Micom(Microprocessor) and its associated circuit is as follows:
1) H and V sync signal is supplied from the signal cable.
2) The Micom(IC401) distinguishes polarity and frequency of H and V sync.
3) The Micom sets operating mode and offers the controlled data. (H-size, H-position, V-size, ... etc.)
4) The controlled data of each mode is stored in itself.
5) User can adjust screen condition by each OSD function. The data of the adjusted condition is stored in EEPROM(IC402).

6. Horizontal and Vertical Oscillation.
This circuit generates the horizontal pulse and the vertical pulse by taking the H and V sync signal.
This circuit consists of the TDA4866(IC601) and the associated circuit.

7. D/D(DC to DC) Converter.
This circuit supplies DC voltage to the horizontal deflection output circuit by increasing DC 50V which is the secondary voltage of the SMPS in accordance with the input horizontal sync signal.

8. Side-Pincushion & Trapezoid Correction Cirucit.
This circuit improves the side-pincushion and the trapezoid distortion of the screen by mixing parabola and saw-tooth wave to output of the horizontal deflection D/D converter which is used for the supply voltage(B +) of the deflection circuit.

9. Horizontal Deflection Output Circuit.
This circuit makes the horizontal deflection by supplying the saw-tooth current to the horizontal deflection yoke.

10. High Voltage Output & FBT(Flyback Transformer).
The high voltage output circuit is used for generating pulse to the primary coil of the FBT(Flyback Transformer secondary of the FBT and it is supplied to the anode, focus, and screen voltage of the CRT.

11. H-Linearity Correction Circuit.
This circuit corrects the horizontal linearity for each horizontal sync frequency.

12. Vertical Output Circuit.
This circuit takes the vertical ramp wave from the TDA4857(IC701) and performs the vertical deflection by supplying the saw-tooth current to the vertical deflection yoke.

13. Dynamic Focus Output Circuit.
This circuit takes the horizontal and the vertical parabola waves from the TDA4857(IC701) and amplifies it to maintain constant focus on center and corners in the screen.

14. H & V Blanking and Brightness Control.
Blanking circuit eliminates retrace line by supplying negative pulse to the G1 of the CRT. And Brightness circuit is used for control of the screen brightness by changing DC level of the G1.

15. Image Rotation (Tilt) Circuit.
This circuit corrects the tilt of the screen by supplying the image rotation signal to the tilt coil which is attached near the deflection yoke of the CRT.

16. Video Pre-Amp Circuit.
This circuit amplifies the analog video signal from 0-0.7V to 0-4V. It is operated by taking the clamp, R, G, B drive and contrast signal from the Micom(IC401).

17. Video Output Amp Circuit.
This circuit amplifies the video signal which comes from the video pre-amp circuit and amplified it to applied the CRT cathode.

ADJUSTMENT

GENERAL INFORMATION

All adjustment are thoroughly checked and corrected when the monitor leaves the factory, but sometimes several adjustments may be required.
Adjustment should be following procedure and after warming up for a minimum of 30 minutes.

- Alignment appliances and tools.
  - IBM compatible PC.
  - Programmable Signal Generator.
    (eg. VG-819 made by Astrodesign Co.)
  - EPROM or EEPROM with saved each mode data.
  - Alignment Adaptor and Software.
  - Digital Voltmeter.
  - White Balance Meter.
  - Luminance Meter.
  - High-voltage Meter.

AUTOMATIC AND MANUAL DEGAUSSING

The degaussing coil is mounted around the CDT so that automatic degaussing when turn on the monitor. But a monitor is moved or faced in a different direction, become poor color purity cause of CDT magnetized, then press DEGAUSS on the OSD menu.

ADJUSTMENT PROCEDURE & METHOD

- Install the cable for adjustment such as Figure 1and run the alignment program on the DOS for IBM compatible PC.
- Set external Brightness and Contrast volume to max position.

1. Adjustment for B^+ Voltage.

1) Display cross hatch pattern at Mode 4.
2) Check C961 (+) voltage to 50± 0.5Vdc.

2. Adjustment for High-Voltage.

1) Display cross hatch pattern at Mode 4.
2) DIST.ADJ→CTRL PWM → High Voltage Command.
3) Adjust High Voltage to 25.5kV±0.1 kVdc.
4) Press Enter Key.

3. Adjustment for Factory Mode (Preset Mode).

1) Display cross hatch pattern at Mode 1.
2) Run alignment program for EB770G on the IBM compatible PC.
3) EEPROM → ALL CLEAR → Y(Yes) command.
   <Caution> *Do not run this procedure unless the EEPROM is changed. All data in EEPROM (mode data and color data) will be erased.*
4) Power button of the monitor turn off → turn on.
5) COMMAND→PRESET START→Y(Yes) command.
6) DIST. ADJ. → CTRL PWM → TILT command.
7) Adjust tilt as arrow keys to be the best condition.
8) DIST. ADJ. → BALANCE command.
9) Adjust parallelogram as arrow keys to be the best condition.
10) Adjust balance of pin-balance as arrow keys to be the best condition.
11) DIST. ADJ. → FOS. ADJ command.
12) Adjust V-SIZE as arrow keys to 230±2mm.
13) Adjust V-POSITION as arrow keys to center of the screen.
14) Adjust H-SIZE as arrow keys to 310±2mm.
15) Adjust H-POSITION as arrow keys to center of the screen.
16) Adjust S-PCC (Side-Pincushion) as arrow keys to be the best condition.
17) Adjust TRAPEZOID as arrow keys to be the best condition.
18) Save of the Mode 1.
19) Display from Mode 2 to 4 and repeat above from number 12) to 19)
20) PRESET EXIT → Y (Yes) command.

4. Adjustment for White Balance and Luminance.

1) Set the White Balance Meter.
2) Press the DEGAUSS on the OSD menu for demagnetization of the CDT.
3) COLOR ADJ. → LUMINANCE command of the alignment program.
4) Set Brightness and Contrast to Max position.
5) Display color 0,0 pattern at Mode 4.
6) COLOR ADJ.→ BIAS ADJ.→ COLOR No. → 1 command of the alignment program.
7) Check whether green color or not at R-BIAS and G-BIAS to min position and B-BIAS to 127(7F) and Sub-Brightness to 177(B1) position. Adjust G2 (screen) command to 0.4± 0.05FL of the raster luminance.
8) Adjust R-BIAS and G-BIAS command to x=0.283± 0.005 and y=0.298±0.005 on the White Balance Meter with PC arrow keys.
9) Adjust SUB-Brightness command to 0.4±0.1FL of the raster luminance.
10) Adjust repeat number 8).
11) After push the “ENTER” key, and “COMMAND → PRESET EXIT → Y(Yes)” command.
12) Display color 15,0 full white pattern at Mode 4.
13) DRIVE ADJ.→ No 1. command.

14) Set Brightness and Contrast to Max position.
15) Set SUB-CONTRAST Max 127(7F) (decimal) position.
16) Set B-DRIVE to 100(64) at DRIVE of the alignment program.
17-1) Adjust R-DRIVE and G-DRIVE command to white balance x=0.283±0.003 and y=0.298±0.003 on the White Balance Meter with PC arrow keys.
17-2) Display color 15,0 window pattern (70x70mm) at mode 4.
18) Adjust SUB-CONTRAST command to 50±2FL .
19) After push the “ENTER” key, and “COMMAND → PRESET EXIT → Y(Yes)” command.
20) Display color 15,0 full white patten at Mode 4.
21) Set Brightness and Contrast to Max position.
22) COLOR ADJ. → LUMINANCE → ABL command.
23) Adjust ABL to 32±1FL of the luminance.
24) Exit from the program.

5. Input EDID Data.

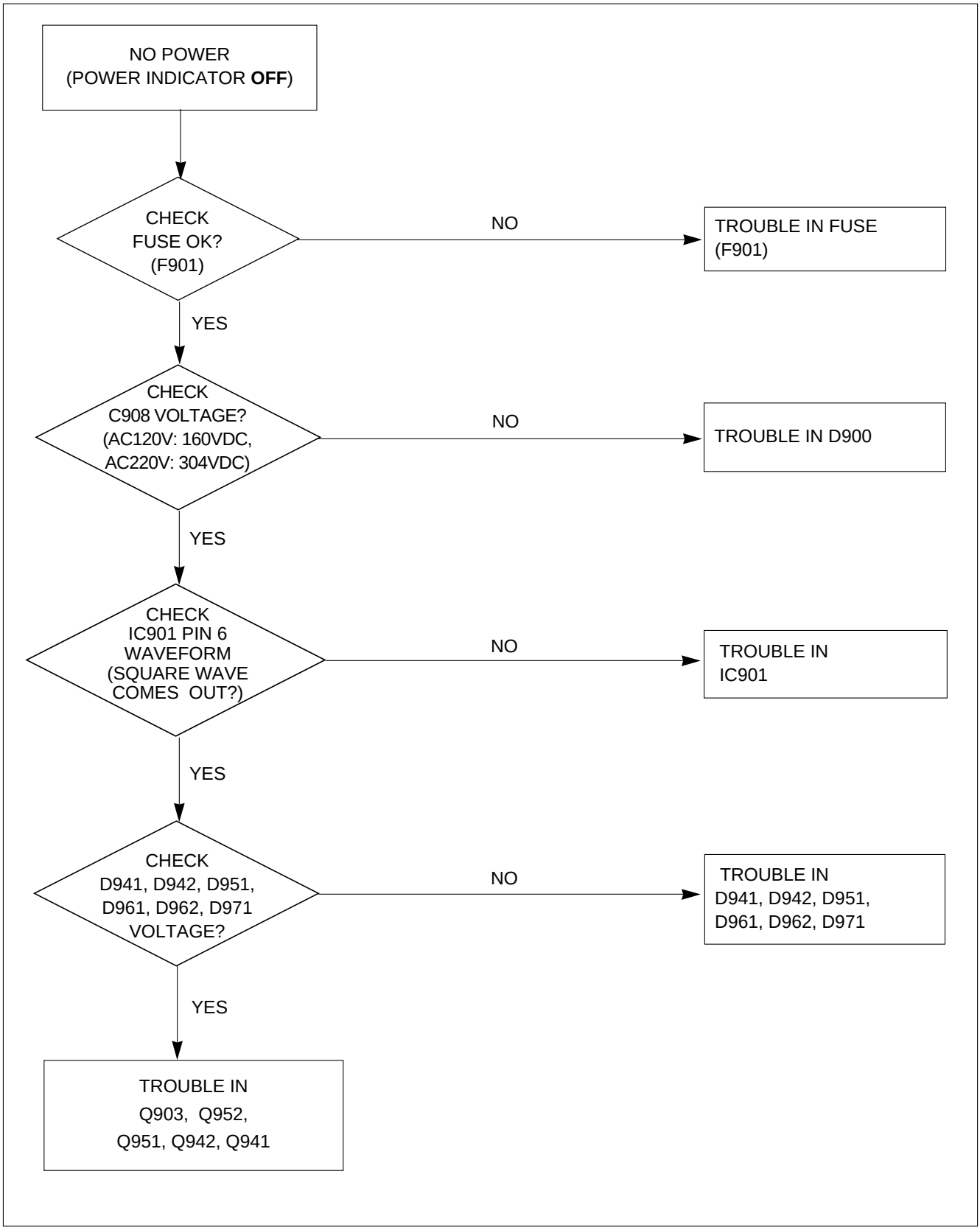
1) Display color 15,0 cross hatch pattern at Mode 4.
2) EEPROM → Write EDID command and confirm “EDID Write OK!!” message of monitor.
3) Exit from the alignment program.
4) Power switch OFF/ON for EDID data save.

6. Adjustment for Focus.

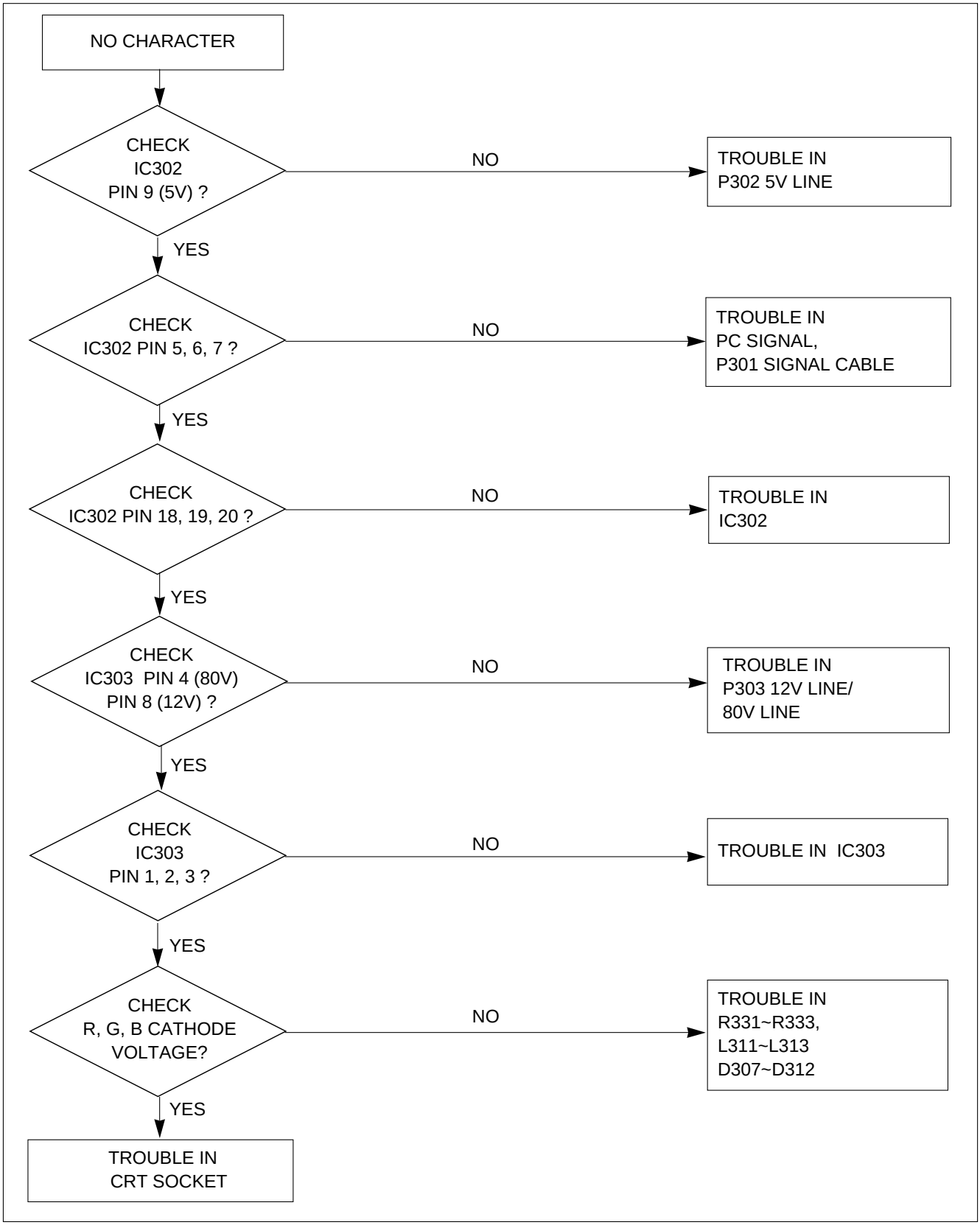
1) Set the Brightness and Contrast to max position.
2) Display H character in full screen at Mode 4.
3) Adjust two Focus control on the FBT that focus should be the best condition.

TROUBLESHOOTING GUIDE

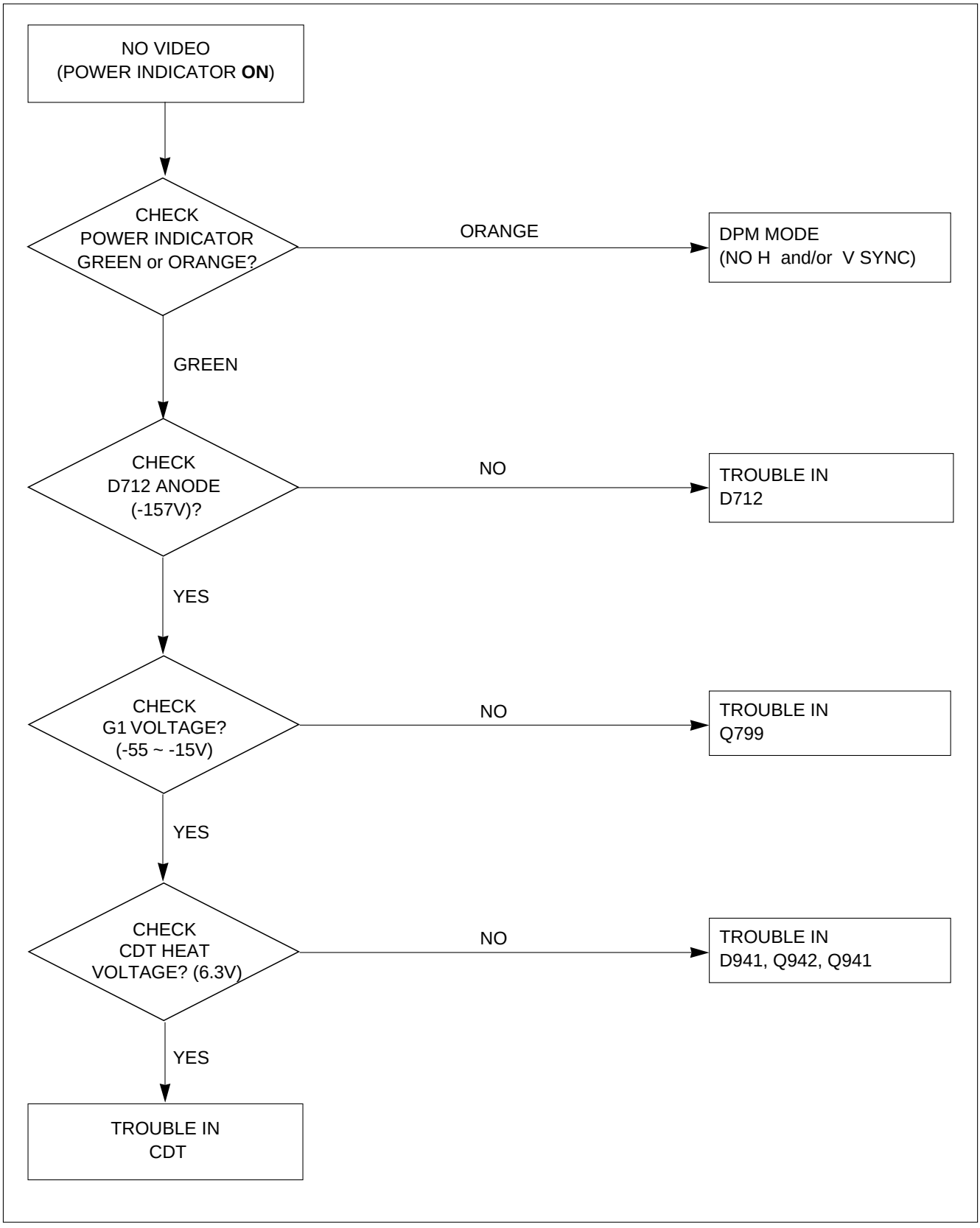
1. NO POWER



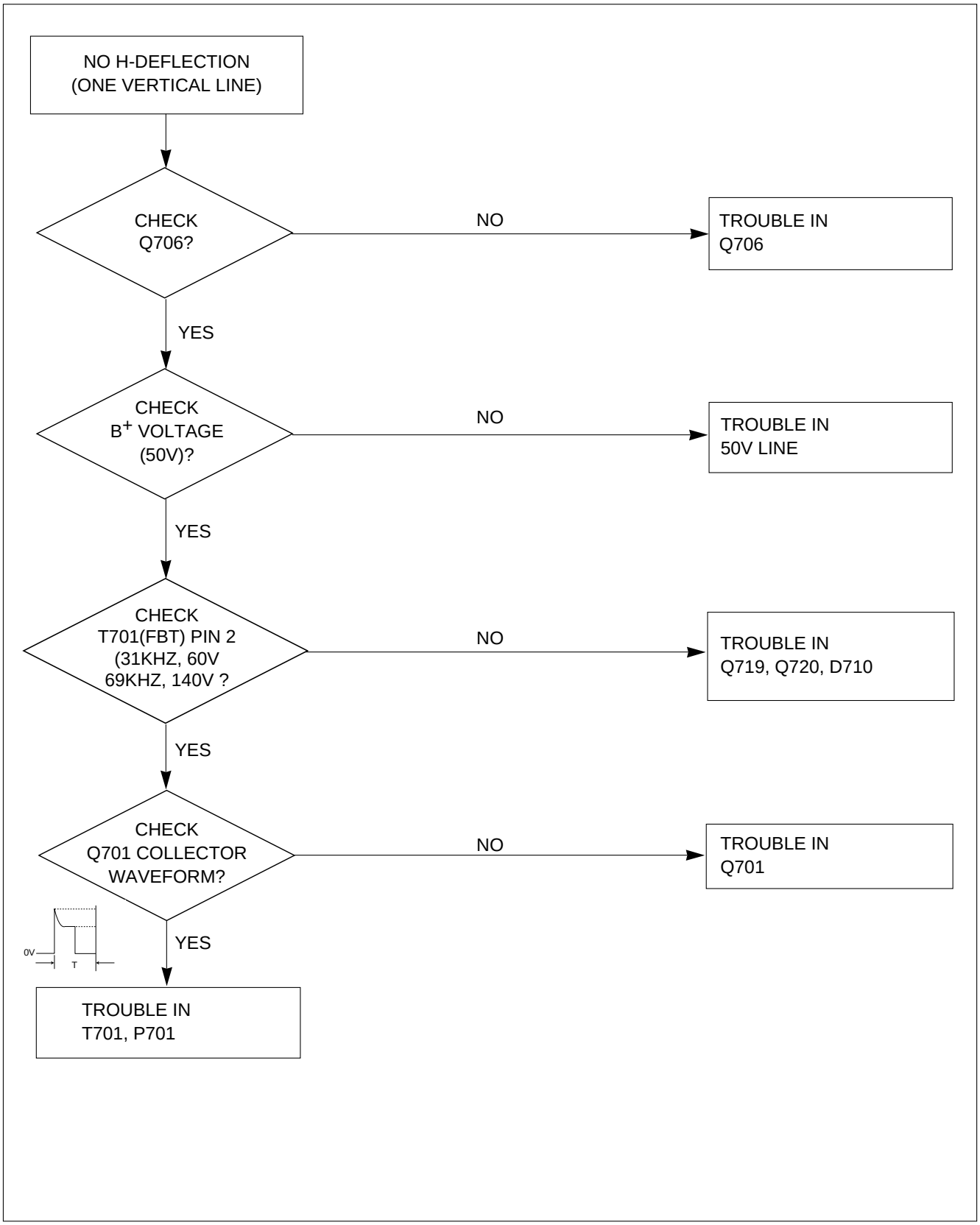
2. NO CHARACTER



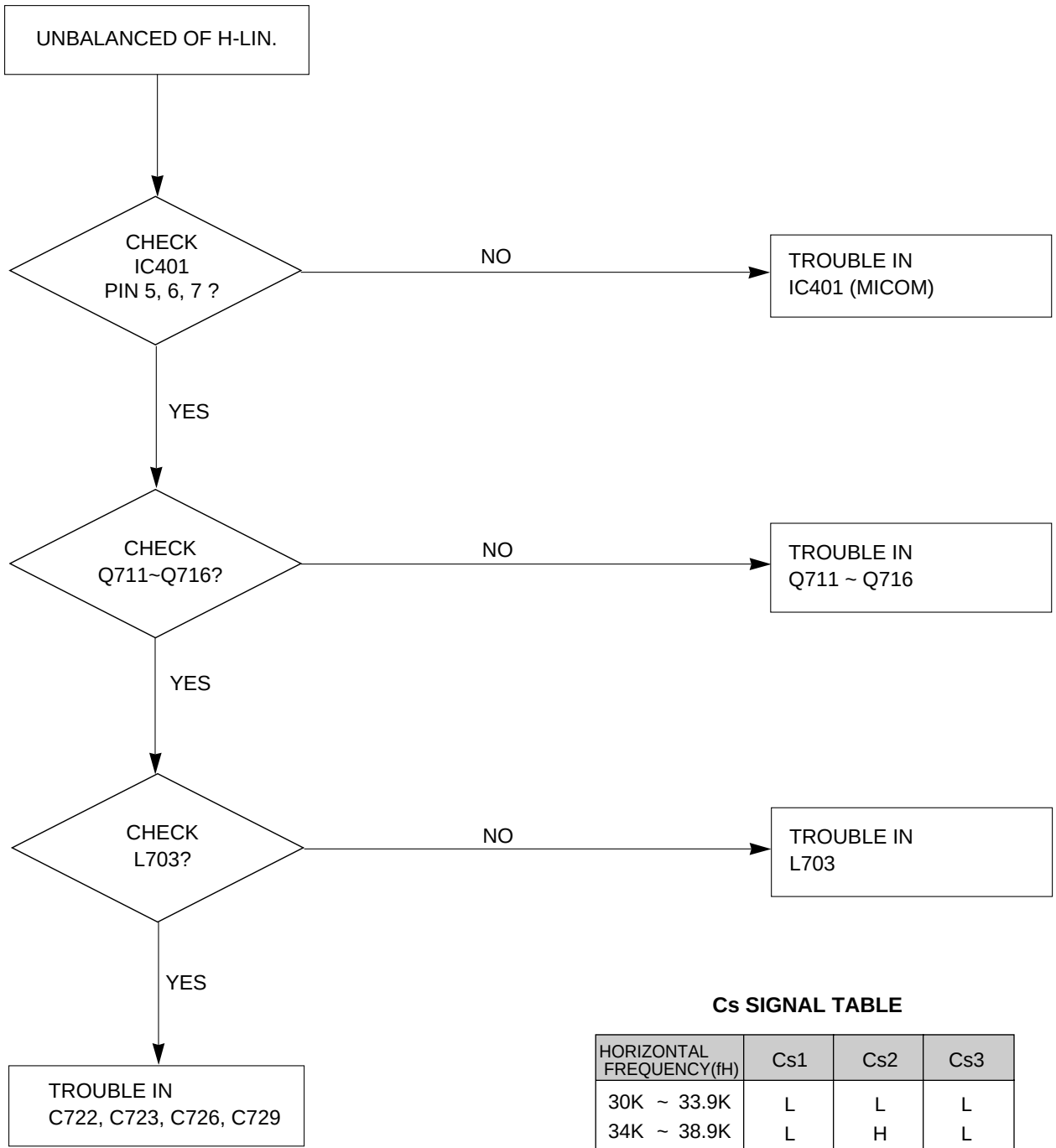
3. NO RASTER


NO VIDEO
(POWER INDICATOR **ON**)
CHECK
POWER INDICATOR
GREEN or ORANGE?
ORANGE
DPM MODE
(NO H and/or V SYNC)
GREEN
CHECK
D712 ANODE
(-157V)?
NO
TROUBLE IN
D712
YES
CHECK
G1 VOLTAGE?
(-55 ~ -15V)
NO
TROUBLE IN
Q799
YES
CHECK
CDT HEAT
VOLTAGE? (6.3V)
NO
TROUBLE IN
D941, Q942, Q941
YES
TROUBLE IN
CDT

4. NO HORIZONTAL DEFLECTION



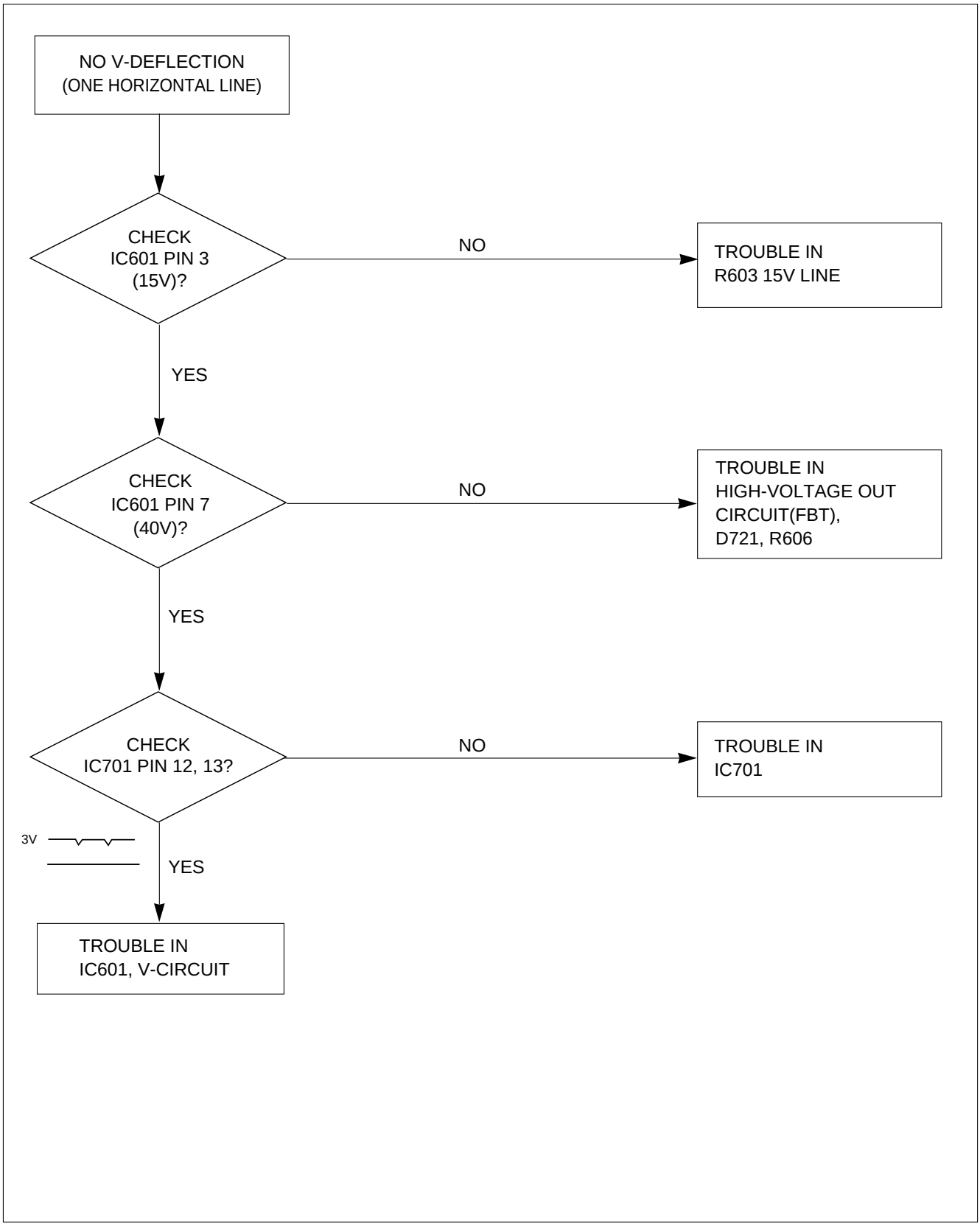
5. TROUBLE IN H-LINEARITY



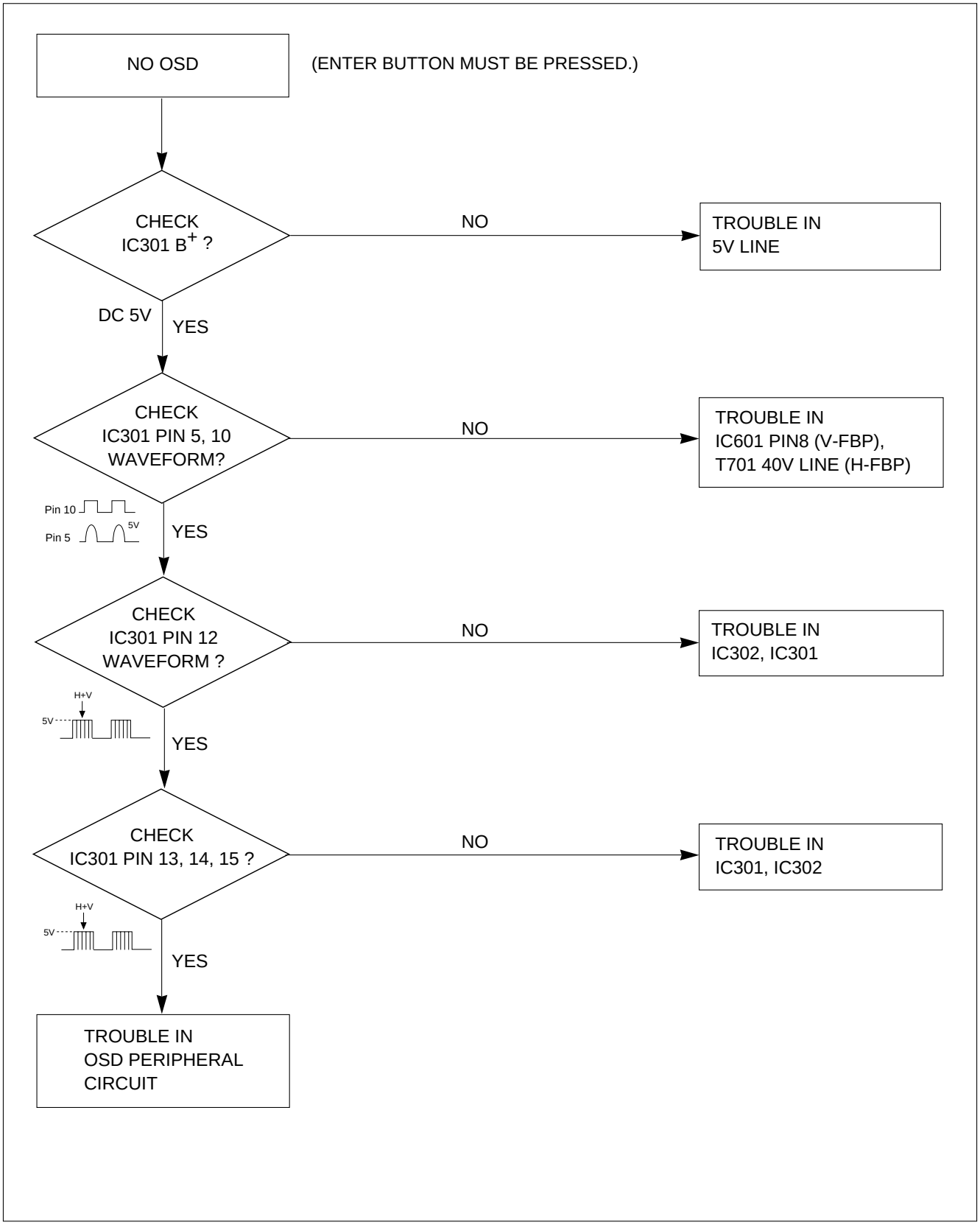
Cs SIGNAL TABLE

HORIZONTAL FREQUENCY(fH)	Cs1	Cs2	Cs3
30K ~ 33.9K	L	L	L
34K ~ 38.9K	L	H	L
39K ~ 44.9K	H	H	L
45K ~ 48.9K	L	L	H
49K ~ 57.9K	H	L	H
58K ~ 65.9K	L	H	H
66K ~ 70K	H	H	H

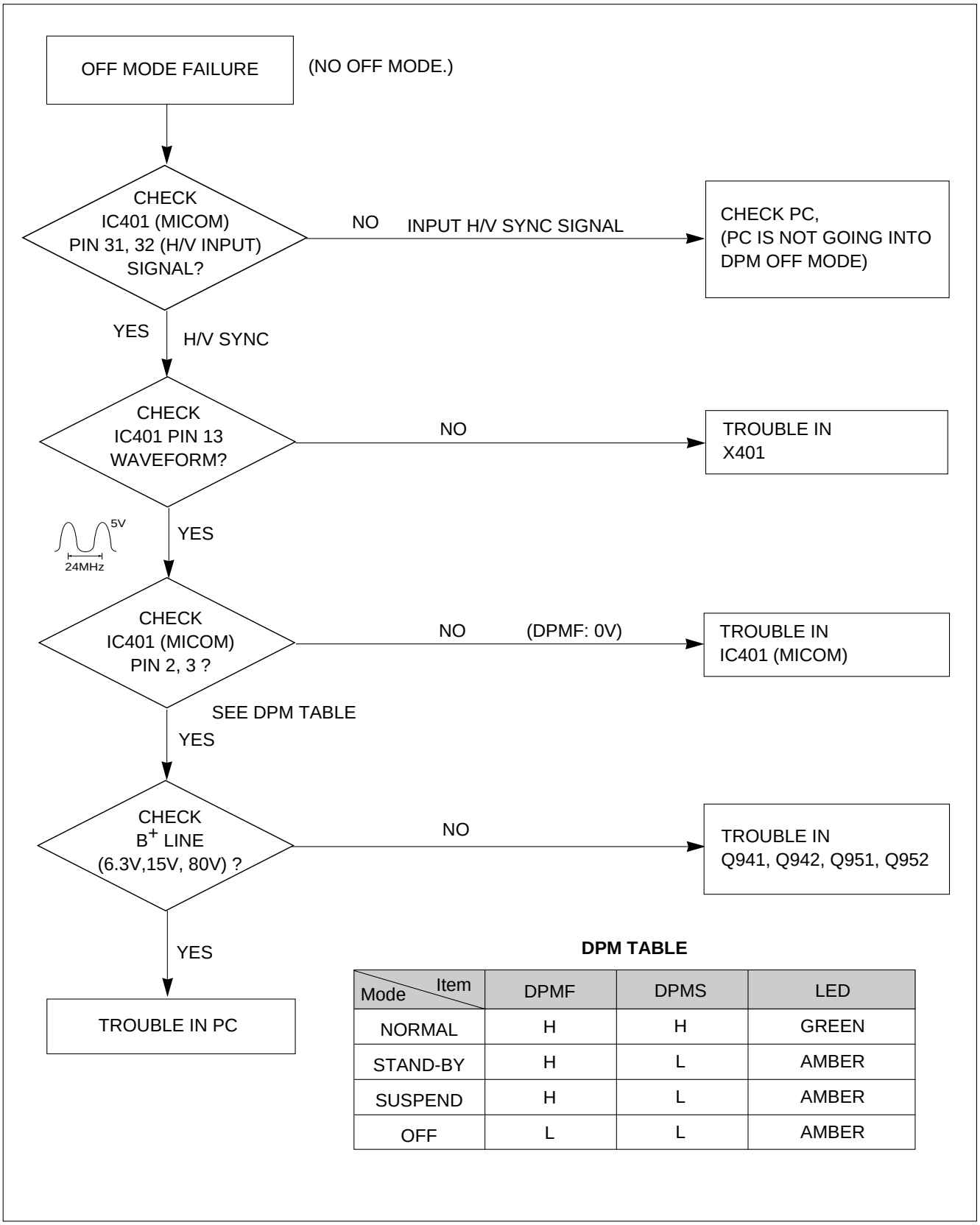
6. NO VERTICAL DEFLECTION



7. TROUBLE IN OSD



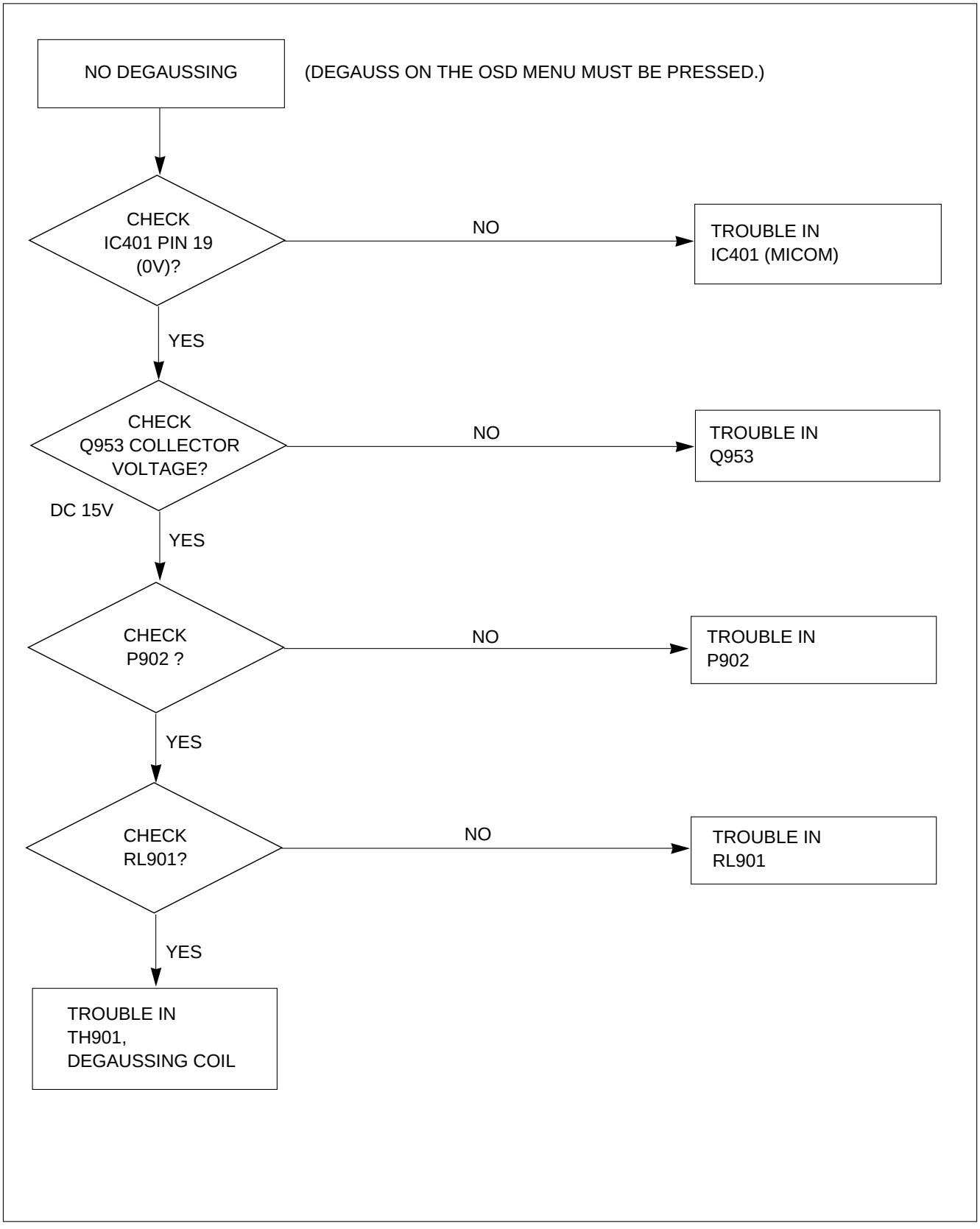
8. TROUBLE IN DPM



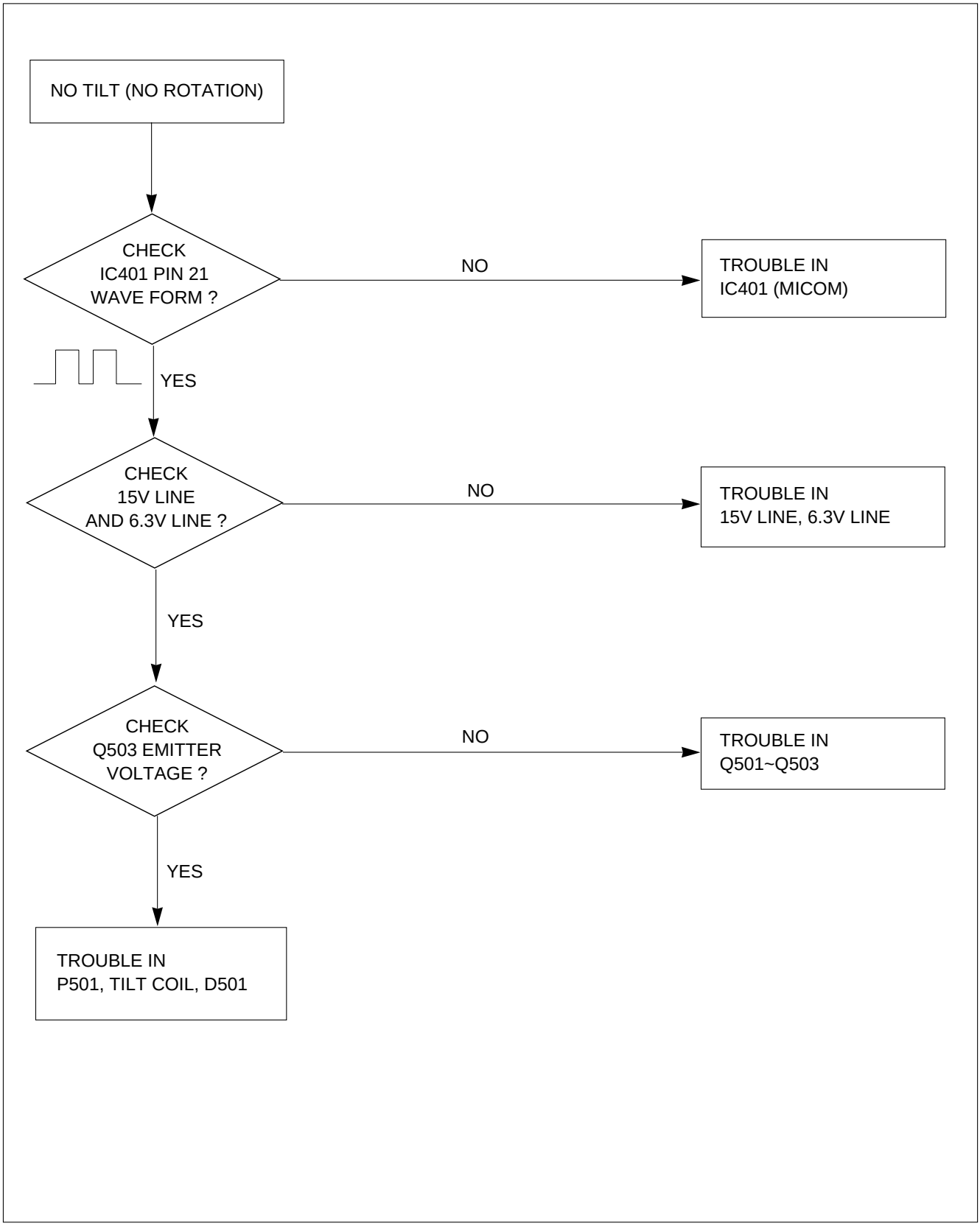
DPM TABLE

Mode \ Item	DPMF	DPMS	LED
NORMAL	H	H	GREEN
STAND-BY	H	L	AMBER
SUSPEND	H	L	AMBER
OFF	L	L	AMBER

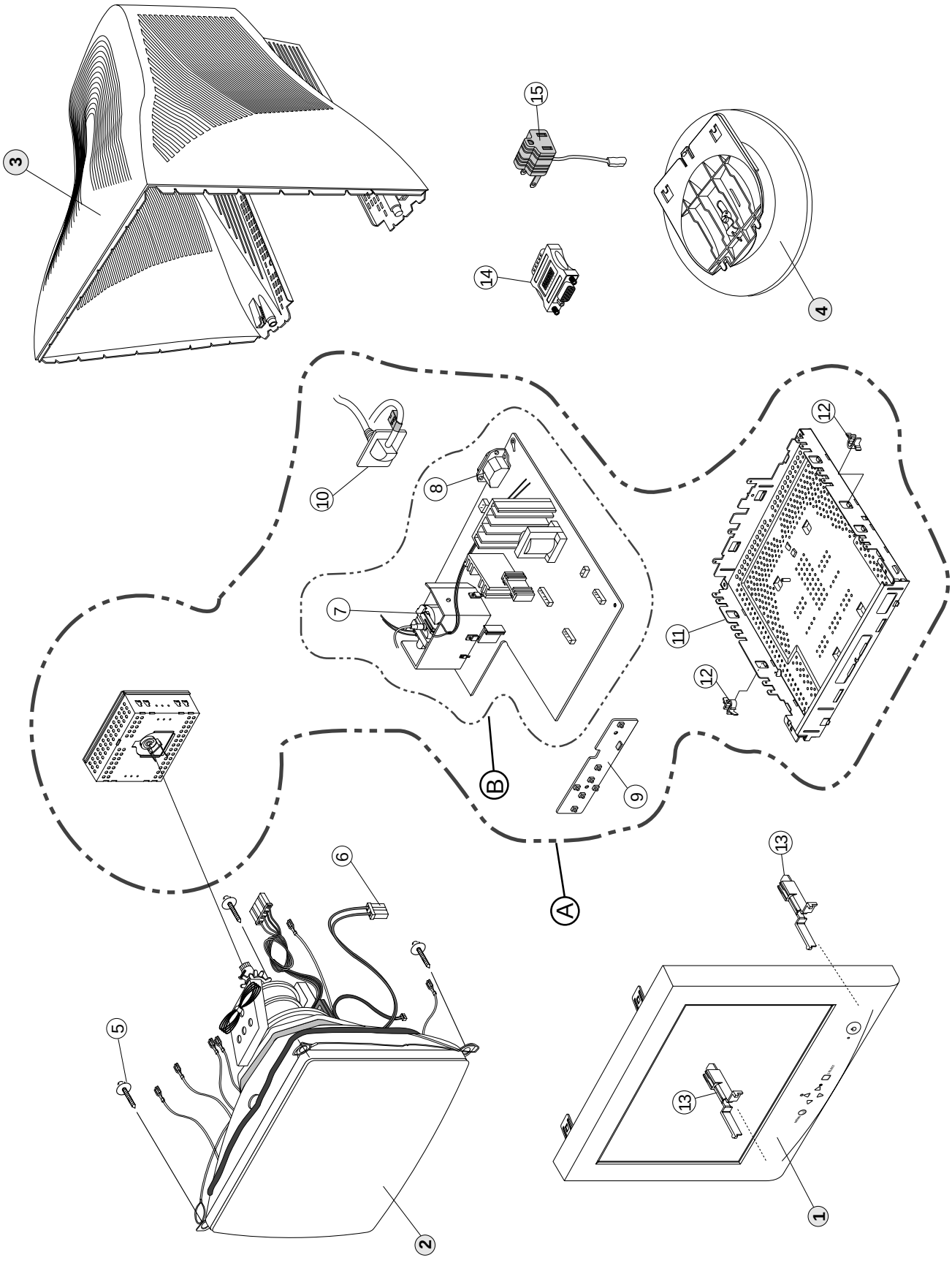
9. NO DEGAUSSING



10. NO TILT (NO ROTATION)



EXPLODED VIEW



EXPLODED VIEW PARTS LIST

Ref. No.	Part No.	Description
1	3091TKC067A	CABINET ASSEMBLY, EB770F(LG CDT) BRAND C062 PC+ABS,85964, **S/WE700B (EB770G-EA)**
	3091TKC067M	CABINET ASSEMBLY, EB770F BRAND C062 AF320T,85964, **S/WE700S (EB770G-NA)**
	3091TKC067P	CABINET ASSEMBLY, EB770F BRAND C062 320T,85964, **未来窗 E700S (EB770G-NA)**
	3091TKC067L	CABINET ASSEMBLY, EB770F BRAND C062 320T, **FLATRON E700S (EB770G-NA)**
2	2423GC4E95A	CDT(CIRC), M41QEE903X 01NLGD **FOR NORTHERN HEMISPHERE (EB770G-EA), (EB770G-NA ; 未来窗)**
	2423GC4E96A	CDT(CIRE), M41QEE903X 01RLGD LG-PHILIPS **FOR EQUATORIAL**
	2423GC4E97A	CDT(CIRC), M41QEE903X 01NLAD LG-PHILIPS **FOR NORTHERN HEMISPHERE (EB770G-NA)**
3	3809TKC035J	BACK COVER ASSEMBLY, EB770F C035 PC+ABS,85964,LG CORE **(EB770G-EA)**
	3809TKC035K	BACK COVER ASSEMBLY, EB770F C035 AF320T,85964,LG CORE **(EB770G-NA)**
4	3043TKK081A	TILT SWIVEL ASSEMBLY, EB770F T057/B046 60HR,85964
5	339-002J	SCREW ASSY PHP+5*25 (FZMW1)+GW18
6	6140TC3004E	COIL,DEGAUSSING, LX31 GET 0.4*120TS,1130MM,19 OHM,W/O EARTH
7	6174T11003E	FBT (FLY BACK TRANSFORMER), 1054A,CB777G LG-PHILIPS 17"
8	6620TKB002B	SOCKET(CIRC),POWER SA-4S HUA JIE AC UNIVERSAL 3PIN BLACK
9	6871TST282C	PWB(PCB) ASSEMBLY,SUB, EB770G CONTROL TOTAL BRAND CA-109 **(EB770G-EA), (EB770G-NA)**
	6871TST282D	PWB(PCB) ASSEMBLY,SUB, EB770G.KQIDML CONTROL TOTAL BRAND CA-109 **(EB770G-NA; INDIA)**
10	6850TA9004A	CABLE,D-SUB UL 2990-9C(7.5) AT 1560MM GLAY CB777G DM
11	4950TKS169A	METAL SHIELD BOTTOM(A-CKD)
12	4930TKK031C	HOLDER, PCB FIX , PC+ABS
13	4810TKK171B	BRACKET, EB770F SUPPORTER CDT
14	6634TFZ002A	ADAPTER, SIGNAL, LIBERTY ENHANCE MAC 6-DIP **(JAPAN ONLY)**
15	381-240A	ADAPTER,AC, KPR-24 KAWASAKI 125V 15A BLACK **(JAPAN ONLY)**
A	3313T17251C	MAIN TOTAL ASSEMBLY, EB770G BRAND CA-109 **(EB770G-EA)**
	3313T17251E	MAIN TOTAL ASSEMBLY, EB770G.NT.DPM2 BRAND CA-109 **(EB770G-NA)**
	3313T17251F	MAIN TOTAL ASSEMBLY, EB770G.KQIDML BRAND CA-109 **(EB770G-NA; INDIA)**
	3313T17251G	MAIN TOTAL ASSEMBLY, EB770G NT MPR-II BRAND CA-109 **(EB770G-NA ; 未来窗)**
B	6871TMT284C	PWB(PCB) ASSEMBLY,MAIN, EB770G KXLVET BRAND CA-109 TOTAL **(EB770G-EA)**
	6871TMT284D	PWB(PCB) ASSEMBLY,MAIN, EB770G NT.DPM2 BRAND CA-109 TOTAL **(EB770G-NA)**
	6871TMT284E	PWB(PCB) ASSEMBLY,MAIN, EB770G KQIDML BRAND CA-109 TOTAL **(EB770G-NA; INDIA)**
	6871TMT284F	PWB(PCB) ASSEMBLY,MAIN, EB770G NT MPR-II BRAND CA-109 TOTAL **(EB770G-NA; 未来窗)**

REPLACEMENT PARTS LIST

CAUTION: BEFORE REPLACING ANY OF THESE COMPONENTS,
READ CAREFULLY THE **SAFETY PRECAUTIONS** IN THIS MANUAL.
* NOTE : **S** SAFETY Mark ⚠
AL ALTERNATIVE PARTS

MODEL: (EB770G-EA), (EB770G-NA) DATE: 2002. 1. 10.

*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		CAPACITORS		
		C201	0CN1040K949	0.1M 50V Z F TA52
		C301	181-288N	MKT 100V 103JTR PHS86103
		C302	0CE107CF638	100UF SHL,SD 16V M FM5 TP 5
		C303	0CK1040K945	0.1UF 50V Z F TR
		C304	0CK1030K945	0.01UF 50V Z F TR
		C305	0CE107CF638	100UF SHL,SD 16V M FM5 TP 5
		C306	181-288N	MKT 100V 103JTR PHS86103
		C307	0CK3910K515	390P 50V K B TS
		C308	0CN1040K949	0.1M 50V Z F TA52
		C309	0CK1040K945	0.1UF 50V Z F TR
		C310	181-288B	MKT 100V 104JTR PHS26104
		C311	0CK1040K945	0.1UF 50V Z F TR
		C312	0CN1040K949	0.1M 50V Z F TA52
		C313	0CK1040K945	0.1UF 50V Z F TR
		C314	0CC4700W405	47PF 500V J SL TP
		C315	0CE476CF638	47UF SHL,SD 16V M FM5 TP 5
		C316	0CK1010W515	100P 500V K B TS
		C317	0CN1040K949	0.1M 50V Z F TA52
		C318	0CK1040K945	0.1UF 50V Z F TR
		C319	0CN1040K949	0.1M 50V Z F TA52
		C320	0CK1040K945	0.1UF 50V Z F TR
		C321	0CE475CK638	4.7UF SHL,SD 50V M FM5 TP 5
		C322	0CN6810K519	680P 50V K B TA52
		C323	0CE476CF638	47UF SHL,SD 16V M FM5 TP 5
		C324	0CK1040K945	0.1UF 50V Z F TR
		C325	181-288B	MKT 100V 104JTR PHS26104
		C326	0CE106CN638	10UF SHL,SD 100V M FM5 TP 5
		C327	181-288B	MKT 100V 104JTR PHS26104
		C328	0CE106CN638	10UF SHL,SD 100V M FM5 TP 5
		C329	181-288B	MKT 100V 104JTR PHS26104
		C330	181-288B	MKT 100V 104JTR PHS26104
		C331	181-288G	MKT 100V 334JTR PHS26334
		C332	181-288G	MKT 100V 334JTR PHS26334
		C333	181-288G	MKT 100V 334JTR PHS26334
		C334	181-288B	MKT 100V 104JTR PHS26104
		C335	181-288B	MKT 100V 104JTR PHS26104
		C336	181-288E	MKT 100V 474JTR PHS 26474
		C339	0CK4710W515	470P 500V K B TS
		C340	0CK1040K945	0.1UF 50V Z F TR
		C341	0CK10302940	0.01M 2KV Z F S
		C342	0CE106CK638	10UF SHL,SD 50V M FM5 TP 5
		C346	0CK10202515	1000PF D 2KV 10% TR B(Y5P)
		C354	0CC0400K115	4P 50V D NP0 TS
		C355	0CC0400K115	4P 50V D NP0 TS
		C356	0CC0400K115	4P 50V D NP0 TS
		C358	0CK8210K515	820P 50V K B TS
		C372	0CK1040K945	0.1UF 50V Z F TR
		C401	0CN1040K949	0.1M 50V Z F TA52

MODEL: (EB770G-EA), (EB770G-NA) DATE: 2002. 1. 10.

*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		C402	0CE476CF638	47UF SHL,SD 16V M FM5 TP 5
		C403	0CK1040K945	0.1UF 50V Z F TR
		C404	0CC1800K415	18P 50V J NPO TP
		C405	0CC1800K415	18P 50V J NPO TP
		C406	0CK1010K515	100PF 50V K B TR
		C407	0CK1010K515	100PF 50V K B TR
		C408	0CK1040K945	0.1UF 50V Z F TR
		C409	0CC5600K415	56P 50V J NP0 TP
		C410	0CK1010K515	100PF 50V K B TR
		C411	0CK1040K945	0.1UF 50V Z F TR
		C412	0CK1040K945	0.1UF 50V Z F TR
		C413	0CK1040K945	0.1UF 50V Z F TR
		C501	0CE106CF638	10UF SHL,SD 16V M FM5 TP 5
		C599	0CE225CK638	2.2UF SHL,SD 50V M FM5 TP 5
		C601	0CE477EH618	470UF KMG 25V M FL TP 5
		C602	181-288W	MKT 100V 124JTR PHS26124
		C603	0CE476CK638	47UF SHL,SD 50V M FM5 TP 5
		C604	181-288T	MKT 100V 223KTR PHS85223
		C605	0CK1020W515	1000P 500V K B TS
		C701	0CQ5621N419	5600P 100V J POLY NI TP
		C702	0CZZTFT001M	ECQB1H103JM3 103J 50V TP5.0 MA
		C703	0CZZTFT001Z	ECQB1H104JM3 104J 50V TP5.0 MA
		C704	0CQ8221N519	0.0082U 100V K POLY NI TP
		C705	0CE476CF638	47UF SHL,SD 16V M FM5 TP 5
		C706	0CZZTFT001Z	ECQB1H104JM3 104J 50V TP5.0 MA
		C707	0CZZTFT002B	ECQV1H154JZ3 154J 50V TP5.0 MA
		C708	0CE227CH638	220UF SHL,SD 25V M FM5 TP 5
		C709	181-288P	MKT 100V 153JTR PHS86153
		C711	0CQ5621N419	5600P 100V J POLY NI TP
		C713	0CQ1031N419	0.01U 100V J POLY NI TP
		C716	0CK2710K515	270P 50V K B TS
		C717	0CE105CN638	1UF SHL,SD 100V M FM5 TP 5
		C718	181-288D	MKT 100V 473JTR PHS26473
		C719	0CZZTAB001A	SM-BP(P)/BP 10UF 50V 13*25 BK5
		C720	0CK33101515	330P 1KV K B TS
		C721	181-477P	123J 19.5*12.0*7.0*7.5 250V J
		C722	181-303R	304J 31.0*21.0*13.0*20.0 250V
		C723	181-303B	124J 20.5*19.0*11.0*10.0 250V
		C724	0CN1040K949	0.1M 50V Z F TA52
		C726	181-482G	334J 18.0*18.0*11.0*7.5 250V J
		C727	0CN1040K949	0.1M 50V Z F TA52
		C728	0CQ5621N419	5600P 100V J POLY NI TP
		C729	181-305W	604J 26.0*19.0*12.5*15.0 250V
		C730	0CN1040K949	0.1M 50V Z F TA52
⚠		C731	0CBZTBU004H	5600PF D 2.5KV H M/PP NI FM20
		C732	0CQ1031N419	0.01U 100V J POLY NI TP
		C733	0CBZTBU003H	362J 20.0*12.0*7.0*10.0 800V J
		C737	0CK10102515	100PF 2KV K B TR
		C739	0CE226CK638	22UF SHL,SD 50V M FM5 TP 5

MODEL: (EB770G-EA), (EB770G-NA)				DATE: 2002. 1. 10.
*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		C740	0CE227EL630	220UF KMG 63V M FM5 BULK
		C741	0CZZTFT002B	ECQV1H154JZ3 154J 50V TP5.0 MA
		C742	0CZZTFT001R	ECQB1H223JM3 223J 50V TP5.0 MA
		C743	0CK3310W515	330P 500V K B TS
		C744	0CE107CP630	100UF SHL 160V M FM5 BULK
		C745	0CK5610W515	560P 500V K B TS
		C746	0CK33101515	330P 1KV K B TS
		C747	0CK3320W515	3300P 500V K B TS
		C748	0CZZTFT002B	ECQV1H154JZ3 154J 50V TP5.0 MA
		C749	0CE2256R638	2.2000UF SMS 250V M FM5 TP5
		C750	0CK1040K945	0.1UF 50V Z F TR
		C751	181-288N	MKT 100V 103JTR PHS86103
		C752	0CQ4721N419	0.0047U 100V J POLY NI TP5
		C754	0CC4700W405	47PF 500V J SL TP
		C755	0CK1040K945	0.1UF 50V Z F TR
		C767	0CK10301510	0.01M 1KV K B S
		C771	0CK10301510	0.01M 1KV K B S
		C773	0CE107CH638	100UF SHL,SD 25V M FM5 TP 5
		C774	181-288B	MKT 100V 104JTR PHS26104
		C775	0CK2210K515	220P 50V K B TS
		C781	0CK1030K945	0.01UF 50V Z F TR
		C801	0CK1040K945	0.1UF 50V Z F TR
		C802	0CE106CK638	10UF SHL,SD 50V M FM5 TP 5
		C805	0CE106CK638	10UF SHL,SD 50V M FM5 TP 5
		C810	0CE106CK638	10UF SHL,SD 50V M FM5 TP 5
		C901	0CBZTBU002B	BULK PCX2 335 474K
		C902	0CBZTBU002A	BULK PCX2 335 224K
		C903	0CKZTTA003A	SC E 222M 10.0FF7 250V TP7.5 S
		C904	0CKZTTA003A	SC E 222M 10.0FF7 250V TP7.5 S
		C905	0CE476EK638	47UF KMG 50V M FM5 TP 5
		C906	0CK1520K515	1500P 50V K B TS
		C908	181-124R	220UF SMG(25.4*40) 400V M VNSN
		C909	181-304T	273J 19.5*14.0*8.5*10.0 400V J
		C910	0CK33101515	330P 1KV K B TS
		C911	0CQ1021N419	1000P 100V J POLY NI TP
		C912	0CKZTTA003D	SC SAMWHA 250V 1000F M TAPING
		C913	0CKZTTA003D	SC SAMWHA 250V 1000F M TAPING
		C941	0CE108EF630	1000UF KMG 16V M FM5 BULK
		C942	0CE107CF638	100UF SHL,SD 16V M FM5 TP 5
		C943	0CK3310W515	330P 500V K B TS
		C944	0CKZTBU003C	SC E 472M 14.0BW7 250V BK7.5 S
		C945	0CKZTBU003C	SC E 472M 14.0BW7 250V BK7.5 S
		C951	0CE228CH630	2200U SHL 25V M FM5
		C952	0CE227CH638	220UF SHL,SD 25V M FM5 TP 5
		C953	0CE107CF638	100UF SHL,SD 16V M FM5 TP 5
		C954	0CE108ED618	1000UF KMG 10V M FL TP 5
		C971	0CE476EN618	47UF KMG 100V M FL TP 5
		C999	0CE227EL630	220UF KMG 63V M FM5 BULK
DIODEs				
		D201	0DLLT0089AA	LITEON LTL-1BEDJ-0C2 TP GREEN/
		D301	0DS141489AB	1N4148 TP GRANDE DO-34 500MW 1
		D302	0DS141489AB	1N4148 TP GRANDE DO-34 500MW 1
		D303	0DS141489AB	1N4148 TP GRANDE DO-34 500MW 1
		D304	0DS141489AB	1N4148 TP GRANDE DO-34 500MW 1
		D305	0DS141489AB	1N4148 TP GRANDE DO-34 500MW 1
		D306	0DS141489AB	1N4148 TP GRANDE DO-34 500MW 1

MODEL: (EB770G-EA), (EB770G-NA)				DATE: 2002. 1. 10.
*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		D307	0DS124409AA	1SS244 TP ROHM KOREA
		D308	0DS124409AA	1SS244 TP ROHM KOREA
		D309	0DS124409AA	1SS244 TP ROHM KOREA
		D310	0DS124409AA	1SS244 TP ROHM KOREA
		D311	0DS124409AA	1SS244 TP ROHM KOREA
		D312	0DS124409AA	1SS244 TP ROHM KOREA
		D313	0DS124409AA	1SS244 TP ROHM KOREA
		D314	0DS124409AA	1SS244 TP ROHM KOREA
		D315	0DS124409AA	1SS244 TP ROHM KOREA
		D316	6210TCE003J	BAS2550T BO SUNG 2550MM AXIAL5
		D317	0DS141489AB	1N4148 TP GRANDE DO-34 500MW 1
		D401	0DS141489AB	1N4148 TP GRANDE DO-34 500MW 1
		D402	971-0016	TIN HDC 0.60H
		D512	0DS141489AB	1N4148 TP GRANDE DO-34 500MW 1
		D701	0DS141489AB	1N4148 TP GRANDE DO-34 500MW 1
		D702	0DS141489AB	1N4148 TP GRANDE DO-34 500MW 1
		D704	0DR150051AA	DMV1500M/F5 ST SGS-THOMSON TO2
		D705	0DR100009CA	RGP10G TP GULF SEMICONDUCTOR L
		D706	0DR359150AA	BY359F-1500 BK PHILIPS SOD10
		D709	0DR400409AB	UF4004 TP G.I DO204AL 400V 1A
		D710	0DR320400AA	S3L20U-4004P15 BK SHINDENGEN N
		D711	0DS141489AB	1N4148 TP GRANDE DO-34 500MW 1
		D712	0DR100009CA	RGP10G TP GULF SEMICONDUCTOR L
		D714	0DS141489AB	1N4148 TP GRANDE DO-34 500MW 1
		D715	0DS141489AB	1N4148 TP GRANDE DO-34 500MW 1
		D716	0DR140059DA	1N4005TB52 TP LITEON DO41 600V
		D717	0DR140059DA	1N4005TB52 TP LITEON DO41 600V
		D718	0DR140059DA	1N4005TB52 TP LITEON DO41 600V
		D719	0DR100009DA	RGP10J TP GULF SEMICONDUCTOR L
		D721	0DR100009CA	RGP10G TP GULF SEMICONDUCTOR L
		D723	0DS141489AB	1N4148 TP GRANDE DO-34 500MW 1
		D724	0RD1800A609	180 OHM 1/2 W (7.0) 5% TA52
		D725	0DS141489AB	1N4148 TP GRANDE DO-34 500MW 1
		D730	971-0016	TIN HDC 0.60H
		D735	0DR140059DA	1N4005TB52 TP LITEON DO41 600V
		D741	0DS141489AB	1N4148 TP GRANDE DO-34 500MW 1
		D767	0DR100009DA	RGP10J TP GULF SEMICONDUCTOR L
		D768	971-0016	TIN HDC 0.60H
		D801	0DS141489AB	1N4148 TP GRANDE DO-34 500MW 1
		D802	0DS141489AB	1N4148 TP GRANDE DO-34 500MW 1
		D900	0DD360000DA	D3SBA60 BK SHINDENGEN 600V 2
		D902	0DR153979AA	1N5397GP TP G.I DO201AD **(EB770G-EA)**
		D902	971-0016	TIN HDC 0.60H **(EB770G-NA)**
		D903	0DR100009CA	RGP10G TP GULF SEMICONDUCTOR L
		D905	0DD400709CB	UF4007 TP G.I DO204AL 1000V 1
		D906	0DS141489AB	1N4148 TP GRANDE DO-34 500MW 1
		D908	0DS141489AB	1N4148 TP GRANDE DO-34 500MW 1
		D941	0DD150009CB	RGP15D TP G.I DO204AC 200V 1.
		D942	0DRGS00089A	SB1H100 GENERAL SEMICONDUCTOR
		D951	0DRGS00110A	UF5403L-5700 GENERAL SEMICONDU
		D952	0DS141489AB	1N4148 TP GRANDE DO-34 500MW 1
		D961	0DRGS00090A	31GF6L-5701 GENERAL SEMICONDUC
		D962	0DRGS00090A	31GF6L-5701 GENERAL SEMICONDUC
		D971	0DR100009DA	RGP10J TP GULF SEMICONDUCTOR L
		ZD201	0DZ560009AG	GDZJ5.6B TP GRANDE DO-34 500MW
		ZD202	0DZ560009AG	GDZJ5.6B TP GRANDE DO-34 500MW\
		ZD203	0DZ560009AG	GDZJ5.6B TP GRANDE DO-34 500MW

MODEL: (EB770G-EA), (EB770G-NA)				DATE: 2002. 1. 10.
*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		ZD301	0DZ560009AG	GDZJ5.6B TP GRANDE DO-34 500MW
		ZD302	0DZ560009AG	GDZJ5.6B TP GRANDE DO-34 500MW
		ZD401	0DZ560009AG	GDZJ5.6B TP GRANDE DO-34 500MW
		ZD404	0DZ560009AG	GDZJ5.6B TP GRANDE DO-34 500MW
		ZD405	0DZ560009AG	GDZJ5.6B TP GRANDE DO-34 500MW
		ZD406	0DZ560009AG	GDZJ5.6B TP GRANDE DO-34 500MW
		ZD407	0DZ560009AG	GDZJ5.6B TP GRANDE DO-34 500MW
		ZD410	0DZ560009AG	GDZJ5.6B TP GRANDE DO-34 500MW
		ZD411	0DZ560009AG	GDZJ5.6B TP GRANDE DO-34 500MW
		ZD701	0DZ110009CF	GDZJ11B TP GRANDE DO34 0.5W 11
		ZD702	0DZ560009AG	GDZJ5.6B TP GRANDE DO-34 500MW
		ZD705	0DZ510009BE	GDZ5.1B TP GRANDE DO34 500MW 5
		ZD901	0DZ510009BE	GDZ5.1B TP GRANDE DO34 500MW 5
		ZD902	0DZ510009BE	GDZ5.1B TP GRANDE DO34 500MW 5
ICs				
		IC301	0IPRPMJ008A	MTV038N-15EG MYSON 16P DIP ST
		IC302	0IPRPNS003A	LM1269NA NATIONAL SEMICONDUCTO
		IC303	0IPRPNS009A	LM2469TA NATIONAL SEMICONDUCTO
		IC304	0IPRPNS005A	LM2480NA NATIONAL SEMICONDUCTO
		IC401	0IZZTSZ169A	SS 42PIN ST G-CHASSIS 6KEY CA-
		IC402	0ISG240860A	M24C08-BN6 8DIP BK 8K SERIAL I
		IC402	0ISG240860A	M24C08-BN6 8DIP BK 8K SERIAL I
		IC403	0IKE704200H	KIA7042AP TO-92 TP 4.2 VOLT.
		IC601	0IPH486600C	TDA4866J 9P ST VERTICAL OUTPUT
		IC701	0IPRPPH008A	TDA4857PS(V2) PHILIPS SDIP32 S
		IC901	0IPMGSK004A	STR-G8644D(LF1140) SANKEN 5P S
COILs & CORES				
		L301	0LA0270K119	0.27UH K 2.3*3.4 TP
		L302	0LA0270K119	0.27UH K 2.3*3.4 TP
		L303	0LA0270K119	0.27UH K 2.3*3.4 TP
		L304	0LA1000K119	100UH K 2.3*3.4 TP
		L311	0LA0820K119	0.82UH K 2.3*3.4 TP
		L312	0LA0820K119	0.82UH K 2.3*3.4 TP
		L313	0LA0820K119	0.82UH K 2.3*3.4 TP
		L702	6140TBZ025C	DR14*20 150UH 0.12*25MM 51T H-
		L703	6140TYZ010F	LX31 GET DR14*15-C5.2,19.5T,6.
		L705	6140TBZ026C	DR15*18-C9.8 100UH 0.1*30MM 40
		L901	6200TLS004B	SQE2424 15MH 0.55MM 70T CB775C
		FB201	6210TCE003J	BAS2550T BO SUNG 2550MM AXIAL5
		FB301	6210TCE003F	BRD3580B BO SUNG 3580MM RADIAL
		FB302	6210TCE003J	BAS2550T BO SUNG 2550MM AXIAL5
		FB303	6210TCE003J	BAS2550T BO SUNG 2550MM AXIAL5
		FB304	6210TCE003J	BAS2550T BO SUNG 2550MM AXIAL5
		FB305	6210TCE003J	BAS2550T BO SUNG 2550MM AXIAL5
		FB308	6210TCE003G	BRS3550B BO SUNG 3550MM RADIAL
		FB309	971-0016	TIN HDC 0.60H
		FB310	6210TCE003A	BRD3510B BO SUNG 3510MM RADIAL
		FB311	6210TCZ001J	BAS3550T0(125-022J) BO SUNG RH
		FB312	6210TCZ001J	BAS3550T0(125-022J) BO SUNG RH
		FB313	6210TCZ001J	BAS3550T0(125-022J) BO SUNG RH
		FB401	6210TCE003J	BAS2550T BO SUNG 2550MM AXIAL5
		FB402	6210TCE003J	BAS2550T BO SUNG 2550MM AXIAL5
		FB403	6210TCE003J	BAS2550T BO SUNG 2550MM AXIAL5
		FB701	6210TCE003L	BAS3580T BO SUNG 3580MM AXIAL5
		FB703	6210TCE003B	BRS3580B BO SUNG 3580MM RADIAL

MODEL: (EB770G-EA), (EB770G-NA)				DATE: 2002. 1. 10.
*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		FB705	6210TCE003L	BAS3580T BO SUNG 3580MM AXIAL5
		FB901	6210TCE003P	BRS2550B BO SUNG 2550MM RADIAL
		FB904	6210TCE003K	BAS3550T BO SUNG 3550MM AXIAL5
		FB913	6210TCE003P	BRS2550B BO SUNG 2550MM RADIAL
		FB921	6210TCE003A	BRD3510B BO SUNG 3510MM RADIAL
		FB922	6210TCE003H	BAS3510T BO SUNG 3510MM AXIAL5
		FB951	6210TCE003J	BAS2550T BO SUNG 2550MM AXIAL5
TRANSISTORs				
		Q501	0TR320209AA	KTC3202-Y(KTC1959) TP KEC TO92
		Q502	0TR127009AA	KTA1270-Y(KTA562TM) TP KEC TO9
		Q503	0TR319809AA	KTC3198-Y(KTC1815) TP KEC TO92
		Q701	0TR200009AB	KTC200-Y TP KEC TO92 NPN
		Q706	0TR580301AA	FAIRCHILD KSC5803(TBTU) ST TO-
		Q707	0TR127009AA	KTA1270-Y(KTA562TM) TP KEC TO9
		Q708	0TR127009AA	KTA1270-Y(KTA562TM) TP KEC TO9
		Q709	0TR141300AB	KTD1413 BK KEC TO220I S NPN
		Q710	0TR440009CA	KSP44 TP SAMSUNG
		Q711	0TF630000CA	IRFS630A BK SAMSUNG 200V 6.5A
		Q712	0TF630000CA	IRFS630A BK SAMSUNG 200V 6.5A
		Q713	0TF630000CA	IRFS630A BK SAMSUNG 200V 6.5A
		Q714	0TR319809AA	KTC3198-Y(KTC1815) TP KEC TO92
		Q715	0TR319809AA	KTC3198-Y(KTC1815) TP KEC TO92
		Q716	0TR319809AA	KTC3198-Y(KTC1815) TP KEC TO92
		Q719	0TF630000CA	IRFS630A BK SAMSUNG 200V 6.5A
		Q720	0TR390409CA	2N3904 TP SAMSUNG TO92 NPN
		Q722	0TR319809AA	KTC3198-Y(KTC1815) TP KEC TO92
		Q723	0TR127009AA	KTA1270-Y(KTA562TM) TP KEC TO9
		Q799	0TR920009AB	KSP92 TP SAMSUNG TO92 HIGH VOL
		Q903	0TRFC10003A	FAIRCHILD KSD882Y-S ST TO126 4
		Q941	0TR319809AA	KTC3198-Y(KTC1815) TP KEC TO92
		Q942	0TR928009AB	KSA928A-Y TP SAMSUNG TO92L PNP
		Q951	0TR319809AA	KTC3198-Y(KTC1815) TP KEC TO92
		Q952	0TR928009AB	KSA928A-Y TP SAMSUNG TO92L PNP
		Q953	0TR319809AA	KTC3198-Y(KTC1815) TP KEC TO92
RESISTORs				
		R201	0RD1001Q609	1K 1/4W(3 5% TA52
		R202	0RD0912Q609	91 OHM 1/4 W (3.4) 5% TA52
		R203	0RD2200Q609	220 1/4W(3 5% TA52
		R204	0RD4300Q609	430 OHM 1/4 W(3.4) 5.00% TA52
		R205	0RD1001Q609	1K 1/4W(3 5% TA52
		R206	0RD0912Q609	91 OHM 1/4 W (3.4) 5% TA52
		R207	0RD4300Q609	430 OHM 1/4 W(3.4) 5.00% TA52
		R208	0RD2200Q609	220 1/4W(3 5% TA52
		R209	0RD9100Q609	910 1/4W(3 5% TA52
		R210	0RD2200Q609	220 1/4W(3 5% TA52
		R211	0RD2200Q609	220 1/4W(3 5% TA52
		R301	0RD0752Q609	75 1/4W(3 5% TA52
		R302	0RD0752Q609	75 1/4W(3 5% TA52
		R303	0RD0752Q609	75 1/4W(3 5% TA52
		R304	0RD3301Q609	3.30K 1/4W(3 5% TA52
		R305	0RD5601Q609	5.60K 1/4W(3 5% TA52
		R306	0RD5601Q609	5.60K 1/4W(3 5% TA52
		R307	0RD1004Q609	1M OHM 1/4 W (3.4) 5% TA52
		R310	0RD1000Q609	100 1/4W(3 5% TA52
		R312	0RD1001Q609	1K 1/4W(3 5% TA52

MODEL: (EB770G-EA), (EB770G-NA)				DATE: 2002. 1. 10.
*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		R314	0RD1000Q609	100 1/4W(3 5% TA52
		R315	0RD1000Q609	100 1/4W(3 5% TA52
		R316	0RD1000Q609	100 1/4W(3 5% TA52
		R317	0RD1000Q609	100 1/4W(3 5% TA52
		R318	0RD1000Q609	100 1/4W(3 5% TA52
		R319	0RD4701Q609	4.70K 1/4W(3 5% TA52
		R320	0RD2001Q609	2K 1/4W(3 5% TA52
		R321	0RD2200Q609	220 1/4W(3 5% TA52
		R322	0RD2200Q609	220 1/4W(3 5% TA52
		R323	0RD2200Q609	220 1/4W(3 5% TA52
		R324	0RD2200Q609	220 1/4W(3 5% TA52
		R327	0RD1001Q609	1K 1/4W(3 5% TA52
		R328	0RD1001Q609	1K 1/4W(3 5% TA52
		R329	0RD1001Q609	1K 1/4W(3 5% TA52
		R330	0RD1000Q609	100 1/4W(3 5% TA52
		R331	0RD1000Q609	100 1/4W(3 5% TA52
		R332	0RD1000Q609	100 1/4W(3 5% TA52
		R333	0RD1000Q609	100 1/4W(3 5% TA52
		R334	0RD3303Q609	330K 1/4W(3 5% TA52
		R335	0RD3303Q609	330K 1/4W(3 5% TA52
		R336	0RD3303Q609	330K 1/4W(3 5% TA52
		R337	0RD1000Q609	100 1/4W(3 5% TA52
		R340	0RN1002F409	10K 1/6W 1 TA52
		R341	0RD0332A609	33 OHM 1/2 W (7.0) 5% TA52
		R342	0RD0332A609	33 OHM 1/2 W (7.0) 5% TA52
		R343	0RD0332A609	33 OHM 1/2 W (7.0) 5% TA52
		R344	0RD0332Q609	33 1/4W(3 5% TA52
		R345	0RD0332Q609	33 1/4W(3 5% TA52
		R346	0RD0332Q609	33 1/4W(3 5% TA52
		R347	0RD1200Q609	120 1/4W(3 5% TA52
		R348	971-0016	TIN HDC 0.60H
		R388	0RD1000Q609	100 1/4W(3 5% TA52
		R389	0RD1000Q609	100 1/4W(3 5% TA52
		R390	0RD1000Q609	100 1/4W(3 5% TA52
		R401	0RD1000Q609	100 1/4W(3 5% TA52
		R402	0RD1002Q609	10K 1/4W(3 5% TA52
		R403	0RD2200Q609	220 1/4W(3 5% TA52
		R404	0RD1000Q609	100 1/4W(3 5% TA52
		R405	0RD1000Q609	100 1/4W(3 5% TA52
		R406	0RD2001Q609	2K 1/4W(3 5% TA52
		R407	0RD2001Q609	2K 1/4W(3 5% TA52
		R408	0RD3302Q609	33K 1/4W(3 5% TA52
		R409	0RD1300Q609	130 1/4W(3 5% TA52
		R410	0RD1300Q609	130 1/4W(3 5% TA52
		R412	0RD2001Q609	2K 1/4W(3 5% TA52
		R413	0RD1001Q609	1K 1/4W(3 5% TA52
		R414	0RD1001Q609	1K 1/4W(3 5% TA52
		R415	0RD1001Q609	1K 1/4W(3 5% TA52
		R416	0RD1801Q609	1.80K 1/4W(3 5% TA52
		R417	0RD1001Q609	1K 1/4W(3 5% TA52
⚠		R418	0RD3901Q609	3.90K 1/4W(3 5% TA52
		R419	0RD1002Q609	10K 1/4W(3 5% TA52
		R420	0RD1002Q609	10K 1/4W(3 5% TA52
⚠		R422	0RD1001Q609	1K 1/4W(3 5% TA52
		R423	0RD5600Q609	560 1/4W(3 5% TA52
		R430	0RD1000Q609	100 1/4W(3 5% TA52
		R431	0RD1000Q609	100 1/4W(3 5% TA52

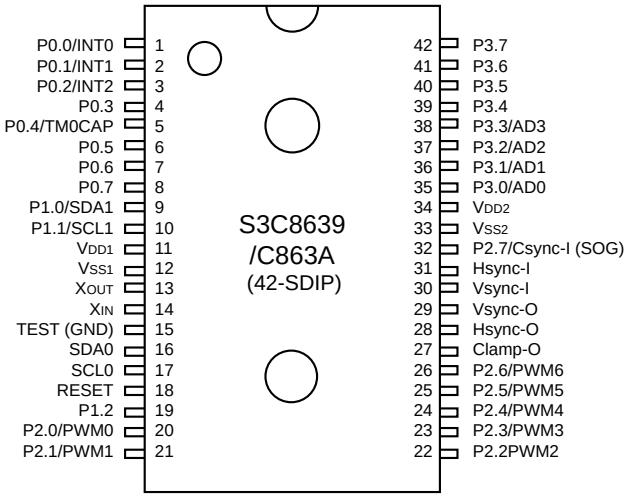
MODEL: (EB770G-EA), (EB770G-NA)				DATE: 2002. 1. 10.
*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		R432	0RD1000Q609	100 1/4W(3 5% TA52
		R433	0RD2001Q609	2K 1/4W(3 5% TA52
		R434	0RD2001Q609	2K 1/4W(3 5% TA52
		R445	0RD1002Q609	10K 1/4W(3 5% TA52
		R501	0RD0102A609	10 OHM 1/2 W (7.0) 5% TA52
		R508	0RD4702Q609	47K 1/4W(3 5% TA52
		R515	0RD1502Q609	15K 1/4W(3 5% TA52
		R597	0RD3902Q609	39K 1/4W(3 5% TA52
		R598	0RD6801Q609	6.80K 1/4W(3 5% TA52
		R599	0RD0202Q609	20 1/4W(3 5% TA52
		R601	0RD1001Q609	1K 1/4W(3 5% TA52
		R602	0RD1001Q609	1K 1/4W(3 5% TA52
		R603	0RN0390H609	0.39 1/2W 5 TA52
		R604	0RD0101A609	1 OHM 1/2 W (7.0) 5% TA52
		R605	0RD0102A609	10 OHM 1/2 W (7.0) 5% TA52
		R606	0RD1000A609	100 OHM 1/2 W (7.0) 5% TA52
		R607	0RN5101F409	5.10K 1/6W 1% TA52
		R608	0RD3900A609	390 OHM 1/2 W (7.0) 5% TA52
		R610	0RD1101Q609	1.1K OHM 1/4 W (3.4) 5% TA52
		R612	0RN5101F409	5.10K 1/6W 1% TA52
		R613	0RD1801Q609	1.80K 1/4W(3 5% TA52
		R700	0RX0221K607	2.2 OHM 2 W 5% TA62
		R701	0RD1500A609	150 OHM 1/2 W (7.0) 5% TA52
		R702	0RD5601Q609	5.60K 1/4W(3 5% TA52
⚠		R704	0RD3601Q609	3.60K 1/4W(3 5% TA52
		R705	0RD1602Q609	16K 1/4W(3 5% TA52
		R706	0RN2701F409	2.70K 1/6W 1% TA52
		R707	0RN3301F409	3.30K 1/6W 1% TA52
		R708	0RN1001F409	1K 1/6W 1% TA52
		R709	0RD2202Q609	22K 1/4W(3 5% TA52
		R710	0RD1000Q609	100 1/4W(3 5% TA52
		R711	0RD1000Q609	100 1/4W(3 5% TA52
		R712	0RD1001Q609	1K 1/4W(3 5% TA52
		R713	0RD1000Q609	100 1/4W(3 5% TA52
⚠		R714	0RN1501F409	1.5K 1/6W 1 TA52
⚠		R714-1	0RN3001F409	3K 1/6W 1% TA52
⚠		R714-2	0RN6200F409	620 1/6W 1% TA52
⚠		R715	0RD2702Q509	27K OHM 1/4 W(3.4) 2% TA52
		R716	0RD7502Q609	75K 1/4W(3 5% TA52
		R717	0RD5601Q609	5.60K 1/4W(3 5% TA52
		R718	971-0016	TIN HDC 0.60H
		R719	0RD4701Q609	4.70K 1/4W(3 5% TA52
		R720	0RC1205Q609	12M OHM 1/4 W(3.4) 5% TA52
		R721	0RD1001Q609	1K 1/4W(3 5% TA52
		R723	0RD1001Q609	1K 1/4W(3 5% TA52
		R724	0RD1001Q609	1K 1/4W(3 5% TA52
		R725	0RD1001Q609	1K 1/4W(3 5% TA52
		R726	0RD5102A609	51K OHM 1/2 W (7.0) 5% TA52
		R727	0RD1001Q609	1K 1/4W(3 5% TA52
		R728	0RX0272K665	27 OHM 2 W 5% SF
		R729	0RD3000A609	300 OHM 1/2 W (7.0) 5% TA52
		R730	0RB0150K665	0.15 OHM 2 W 5% SF
		R731	0RD1002Q609	10K 1/4W(3 5% TA52
		R732	0RD6802Q509	68K OHM 1/4 W (3.4) 2% TA52
		R733	0RD1002Q609	10K 1/4W(3 5% TA52
		R734	0RD0222A609	22 OHM 1/2 W (7.0) 5% TA52
		R735	0RD1001Q609	1K 1/4W(3 5% TA52

MODEL: (EB770G-EA), (EB770G-NA)				DATE: 2002. 1. 10.
*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		R736	0RX1501J609	1.5KOHM 1 W 5% TA52
		R737	0RN0560H609	0.56 1/2W 5 TA52
		R738	0RN0560H609	0.56 1/2W 5 TA52
		R740	0RD0271A609	2.7 OHM 1/2 W (7.0) 5% TA52
		R741	0RD1000Q609	100 1/4W(3 5% TA52
		R742	0RD4702Q609	47K 1/4W(3 5% TA52
		R743	0RD2701Q509	2.7K OHM 1/4 W(3.4) 2% TA52
		R744	0RD1001A609	1K OHM 1/2 W (7.0) 5% TA52
		R745	0RD4702Q609	47K 1/4W(3 5% TA52
		R746	0RD2201Q609	2.20K 1/4W(3 5% TA52
		R747	0RD3001Q609	3K 1/4W(3 5% TA52
		R748	0RD4702Q609	47K 1/4W(3 5% TA52
		R749	0RD2201Q609	2.20K 1/4W(3 5% TA52
		R750	0RD3001Q609	3K 1/4W(3 5% TA52
		R752	0RD2201Q609	2.20K 1/4W(3 5% TA52
		R753	0RD3001Q609	3K 1/4W(3 5% TA52
		R754	0RX4300K607	430 OHM 2 W 5% TA62
		R755	0RD0471Q609	4.70 1/4W(3 5% TA52
		R756	0RD2202A609	22K OHM 1/2 W (7.0) 5% TA52
		R757	0RD0222A609	22 OHM 1/2 W (7.0) 5% TA52
		R758	0RN1303F409	130K 1/6W 1% TA52
		R759	0RD1302Q509	13K OHM 1/4 W (3.4) 2% TA52
		R760	0RD5103Q609	510K 1/4W(3 5% TA52
		R761	0RD3001Q609	3K 1/4W(3 5% TA52
		R762	0RD3001Q609	3K 1/4W(3 5% TA52
		R763	0RD3001Q609	3K 1/4W(3 5% TA52
		R764	0RD6801Q609	6.80K 1/4W(3 5% TA52
		R766	0RD1001Q609	1K 1/4W(3 5% TA52
		R768	0RD8203A609	820K OHM 1/2 W (7.0) 5% TA52
		R771	0RD3301Q609	3.30K 1/4W(3 5% TA52
		R772	0RD2702Q509	27K OHM 1/4 W(3.4) 2% TA52
		R773	0RD3302A609	33K OHM 1/2 W (7.0) 5% TA52
		R775	0RD4701Q609	4.70K 1/4W(3 5% TA52
		R779	0RD4701Q609	4.70K 1/4W(3 5% TA52
		R782	0RD3301A609	3.3K OHM 1/2 W(7.0) 5.00% TA52
		R784	0RD1000Q609	100 1/4W(3 5% TA52
		R789	0RD6800Q609	680 1/4W(3 5% TA52
		R793	0RD4702Q609	47K 1/4W(3 5% TA52
		R797	0RD1501Q609	1.50K 1/4W(3 5% TA52
		R798	0RD2001Q609	2K 1/4W(3 5% TA52
		R799	0RD1502Q609	15K 1/4W(3 5% TA52
		R801	0RD1802Q609	18K 1/4W(3 5% TA52
		R802	0RD3302Q609	33K 1/4W(3 5% TA52
		R803	0RD2001Q609	2K 1/4W(3 5% TA52
		R805	0RD2001Q609	2K 1/4W(3 5% TA52
		R806	0RD4702Q609	47K 1/4W(3 5% TA52
		R808	0RD6802Q609	68K 1/4W(3 5% TA52
		R809	0RMZTWD001G	RWR SMART 1OHM 5 W 5% PD TYPE
		R813	0RD4302A609	43K OHM 1/2 W(7.0) 5.00% TA52
		R814	0RD1002Q609	10K 1/4W(3 5% TA52
⚠		R816	0RN3601F409	3.6K 1/6W 1 TA52
⚠		R818	0RN2202F409	22K 1/6W 1% TA52
		R819	0RD4702Q609	47K 1/4W(3 5% TA52
		R831	0RD1002Q609	10K 1/4W(3 5% TA52
		R901	0RD4703A609	470K OHM 1/2 W (7.0) 5% TA52
		R903	0RD5600A609	560 OHM 1/2 W (7.0) 5% TA52
		R904	0RX1503K607	150K OHM 2 W 5% TA62
		R905	0RD2201Q609	2.20K 1/4W(3 5% TA52
		R906	0RD6200Q609	620 1/4W(3 5% TA52
		R908	0RN0220H609	0.22 1/2W 5% TA52
		R910	0RX4702J609	47K OHM 1 W 5% TA52
		R925	0RB0120K607	0.12 OHM 2 W 5% TA62

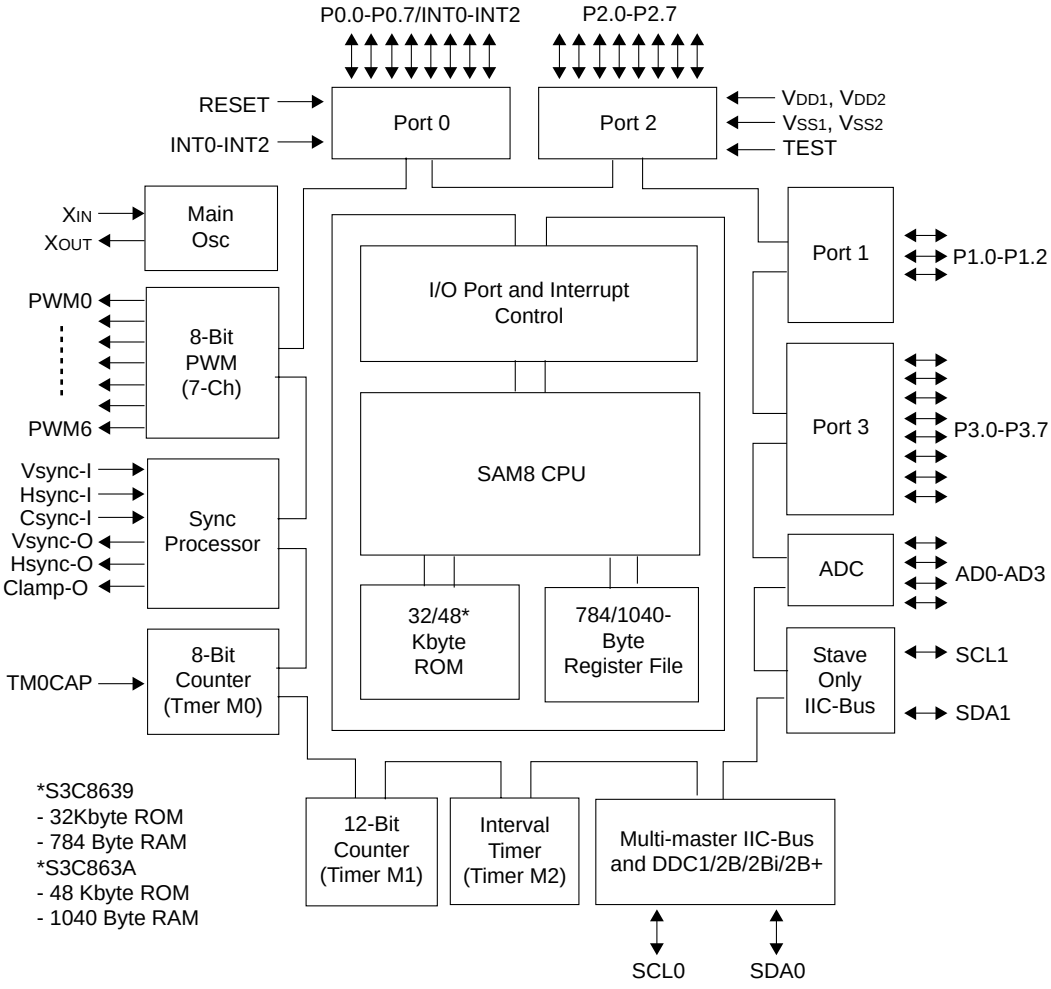
MODEL: (EB770G-EA), (EB770G-NA)				DATE: 2002. 1. 10.
*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		R941	0RN0220H609	0.22 1/2W 5% TA52
		R944	0RD4700A609	470 OHM 1/2 W (7.0) 5% TA52
		R945	0RD4701Q609	4.70K 1/4W(3 5% TA52 **(EB770G-EA)**, **未來窗**
		R945-1	0RD4701Q609	4.70K 1/4W(3 5% TA52 **(EB770G-NA)**
		R951	0RN0910H609	0.91 1/2W 5 TA52
		R952	0RD4702A609	47K OHM 1/2 W (7.0) 5% TA52
		R953	0RX4700J609	470 OHM 1 W 5% TA52
		R954	0RD4701Q609	4.70K 1/4W(3 5% TA52
		R955	0RD4701Q609	4.70K 1/4W(3 5% TA52
		R956	0RD4702Q609	47K 1/4W(3 5% TA52
		R957	0RD0472A609	47 OHM 1/2 W (7.0) 5% TA52
		R960	0RD2200A609	220 OHM 1/2 W (7.0) 5% TA52
		R967	971-0016	TIN HDC 0.60H
		OTHERs		
		F901	0FZZTTH001D	TIME LAG HBC 3.15A/250V,215 3.
		J27	0RD0471Q609	4.70 1/4W(3 5% TA52
		J59	0RD1000Q609	100 1/4W(3 5% TA52
		J99	0RD3302Q609	33K 1/4W(3 5% TA52
		RL901	6920TBB005A	ALA2PF12 MATSUSHITA **(EB770G-EA)**
		RL901	6920TBA001A	DY3MA-DC10 DONGYANG **(EB770G-NA)**
		SC301	6620TBD004A	GZS10-2-101 DUOLING(SANLING) 1
		SC901	6620TKB002B	SA-4S HUA JIE AC UNIVERSAL 3PI
		SG301	6918TRT005A	SSG-102-A0,1KV SMART RADIAL TA
		SG302	6918TRT005A	SSG-102-A0,1KV SMART RADIAL TA
		SG303	6918TRT005A	SSG-102-A0,1KV SMART RADIAL TA
		SG304	6918TRT005A	SSG-102-A0,1KV SMART RADIAL TA
		SG305	6918TRT005A	SSG-102-A0,1KV SMART RADIAL TA
		SG701	6918TRT005A	SSG-102-A0,1KV SMART RADIAL TA
		SW201	140-058D	SKHV10911A LGEC NON 12 20 HORI
		SW202	140-058D	SKHV10911A LGEC NON 12 20 HORI
		SW203	140-058D	SKHV10911A LGEC NON 12 20 HORI
		SW204	140-058D	SKHV10911A LGEC NON 12 20 HORI
		SW205	140-058D	SKHV10911A LGEC NON 12 20 HORI
		SW206	140-058D	SKHV10911A LGEC NON 12 20 HORI
		SW207	140-058D	SKHV10911A LGEC NON 12 20 HORI
⚠		T701	6174T11003E	"1054A,CB777G LG-PHILIPS 17"""
		T702	6170TCZ006A	EE2218 2.3 MH D/FOCUS(CB775C),
		T703	6170TCZ001D	EI2218 4.0MH H-DRIVE,EB770G
		T901	6170TMZ132A	EER3541 150UH V-16PIN EB770G S
		TH901	6322B00002B	MZ72-9RM290V GAOLI 9OHM 20% 2P
		TH902	6322TA080BA	SCK-084 THINKING 8 ohm 15% 264
		X401	6202TTB003B	HC-49/U HARMONY RADIAL 12MHZ 3

PIN CONFIGURATION

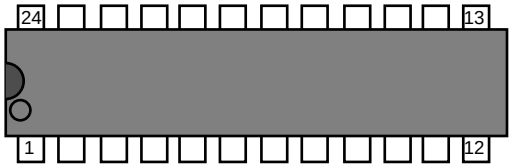
S3P863A



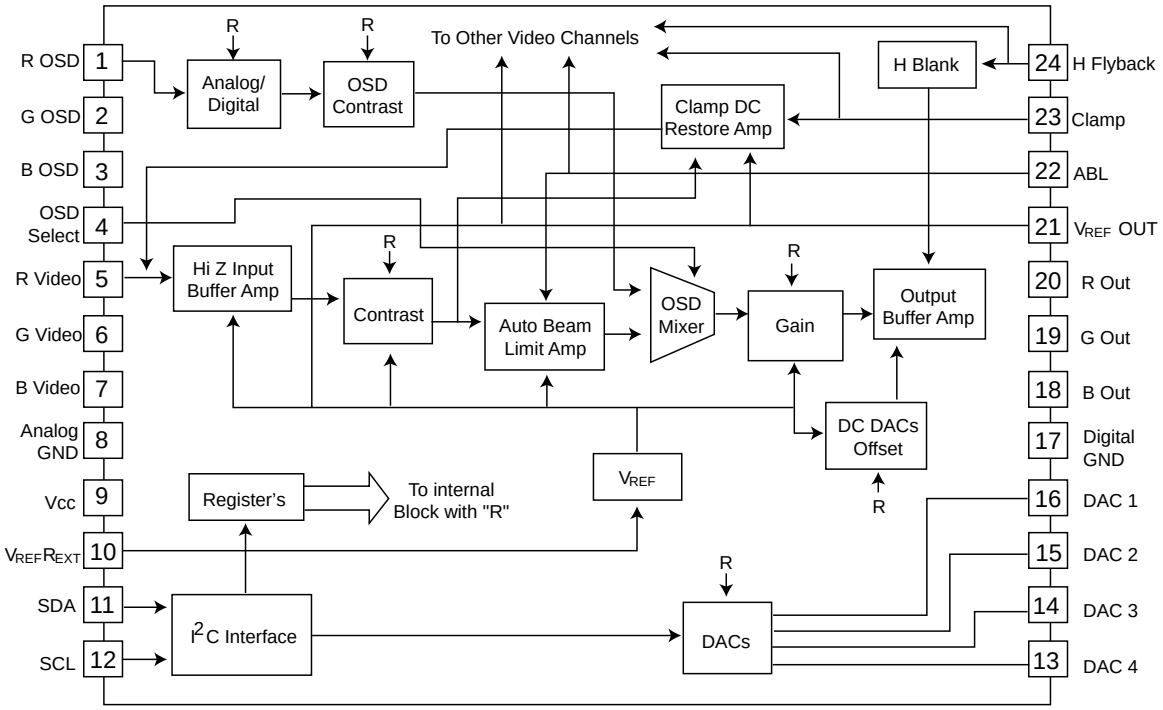
BLOCK DIAGRAM



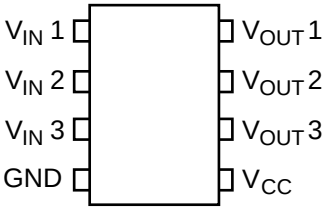
LM1269 110 MHz I²C RGB Video Amplifier System with OSD & DACs



Block and Connection Diagram

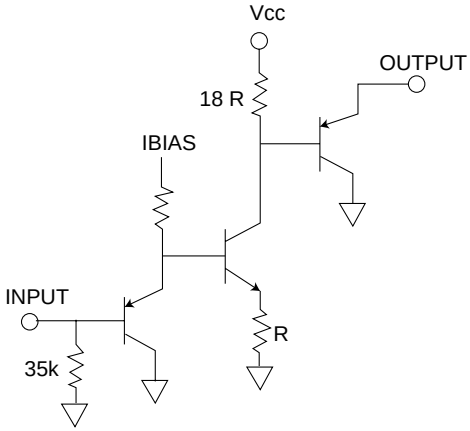


LM2480 80V Triple Bias Clamp



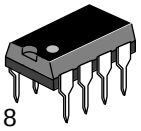
Pin Configuration

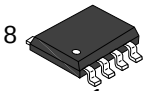
Block Diagram



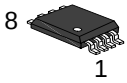
M24C08 Serial I²C BUS EEPROM

PSDIP8 (BN)
0.25mm Frame

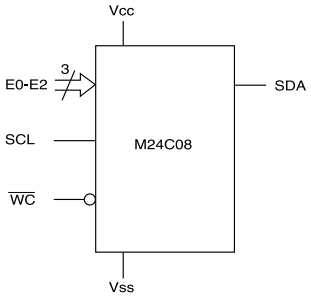




SO8 (MN)
150mil Width



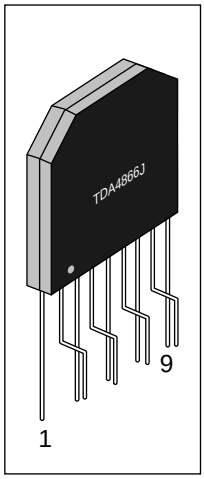
TSSOP8 (DW)
169mil Width

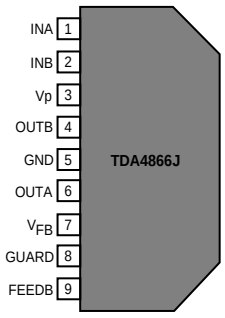


Logic Dirgram

SYMBOL	DESCRIPTION
E0-E2	Chip Enable Input
SDA	Serial Data Address Input/Output
SCL	Serial Clock
WC	Write Control
Vcc	Supply Voltage
Vss	Ground

TDA4866J Current Driven Vertical Deflection Booster

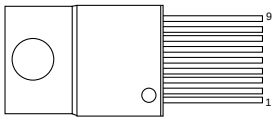




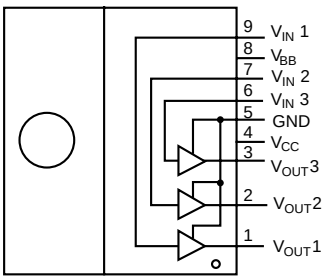
Pin Configuration

PIN	SYMBOL
1	INA
2	INB
3	V_P
4	OUTB
5	GND
6	OUTA
7	V_{FB}
8	GUARD
9	FEEDB

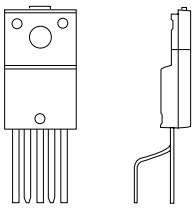
LM2469 Monolothic Triple 9nS high Gain CRT Driver



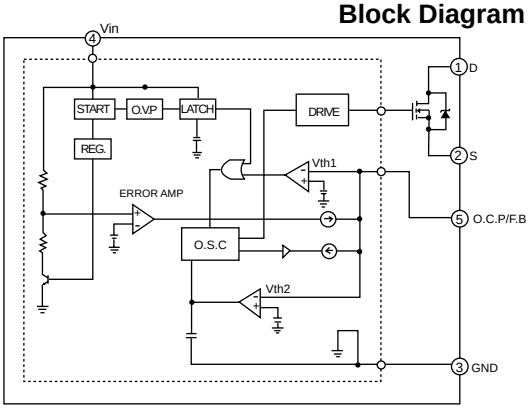
Connection Diagram



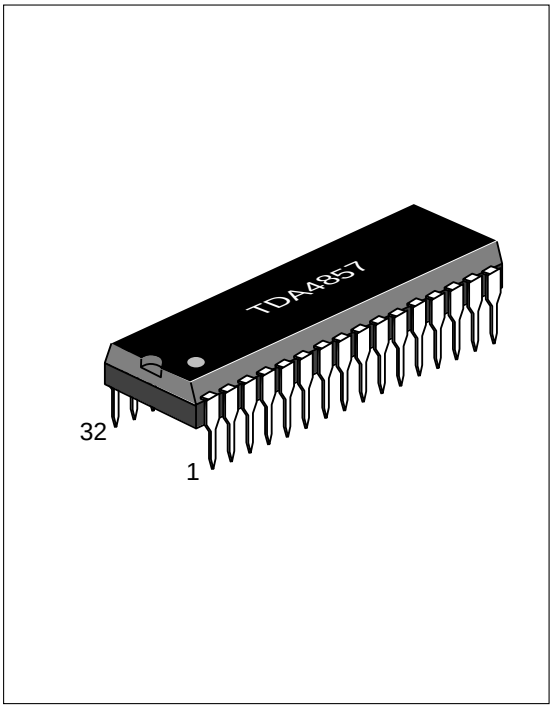
STR-G8644D

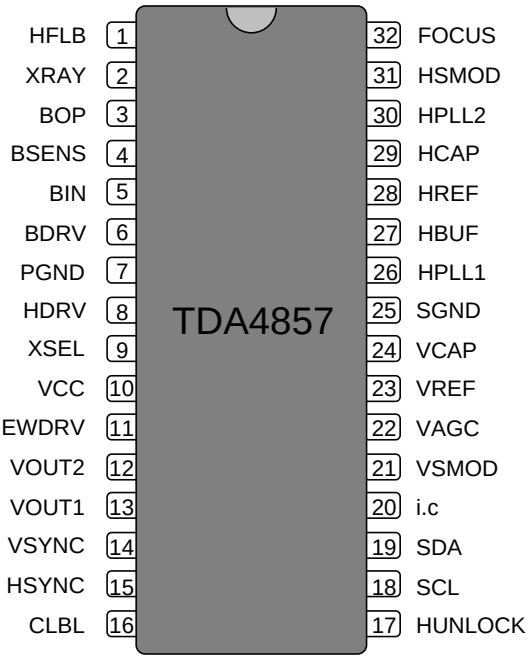


Block Diagram



TDA4857 Autosync Deflection Controller



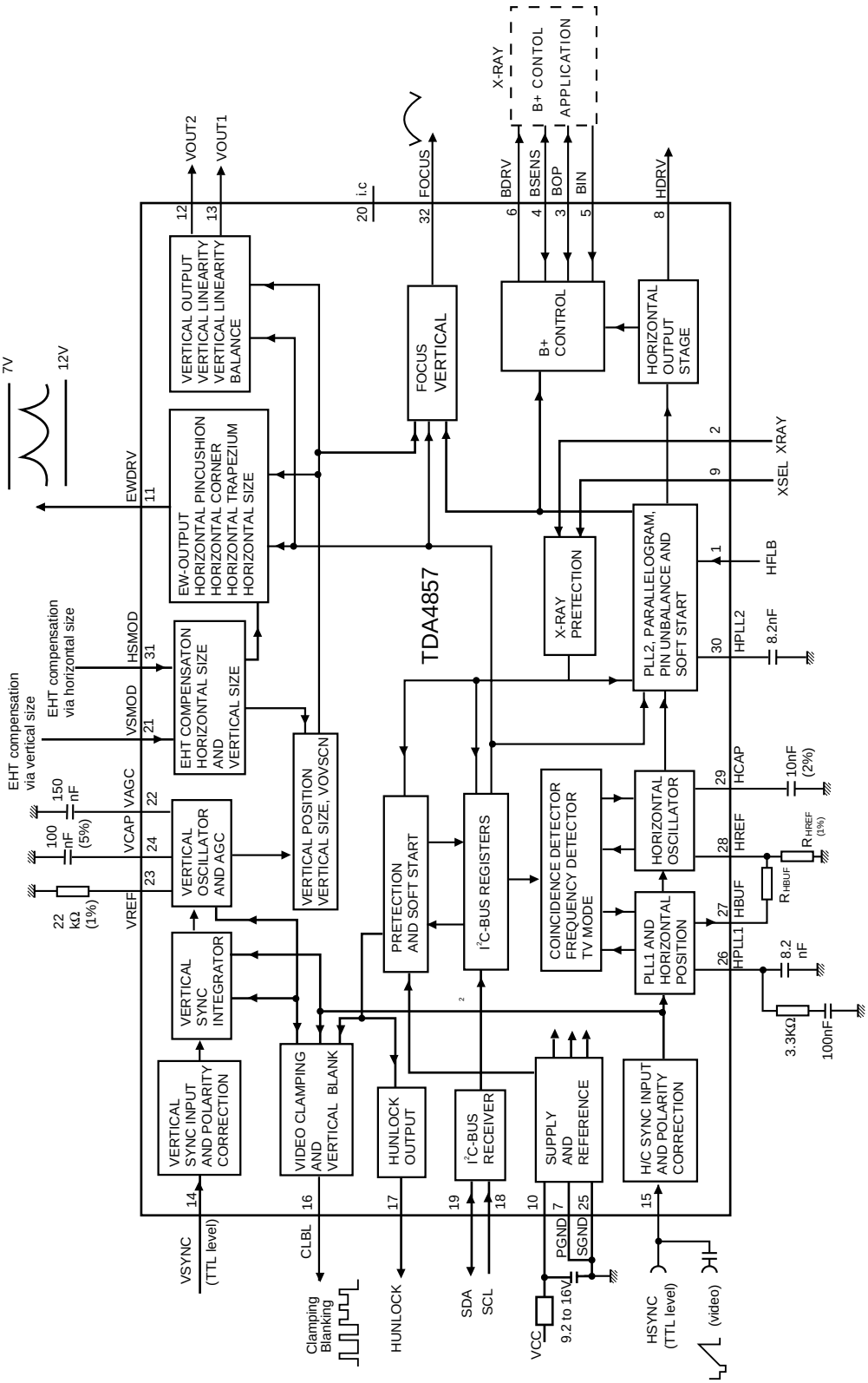


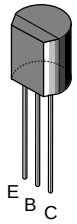
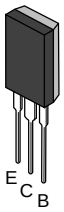
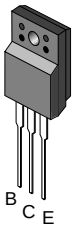
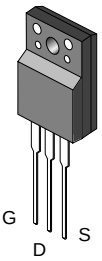
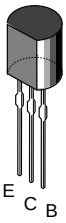
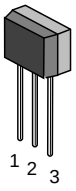
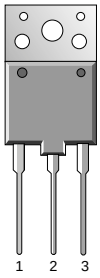
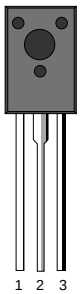
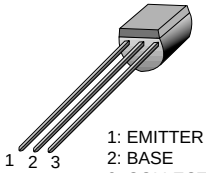
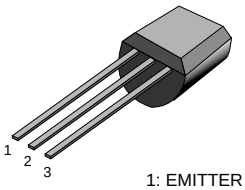
Pin Configuration

PIN	SYMBOL	DESCRIPTION
1	HFLB	Horizontal Flyback Input
2	XRAY	X-ray Protection Input
3	BOP	B^+ Control OTA Output
4	BSENS	B^+ Control Comparator Input
5	BIN	B^+ Control OTA Input
6	BDRV	B^+ Control Driver Output
7	PGND	Power Ground
8	HDRV	Horizontal Driver Output
9	XSEL	Select Input for X-ray reset
10	Vcc	Supply Voltage
11	EWDRV	EW Waveform Output
12	VOUT2	Vertical Output 2 (Ascending Sawtooth)
13	VOUT1	Vertical Output 1 (Descending Sawtooth)
14	VSYNC	Vertical Synchronization Input
15	HSYNC	Horizontal / Composite Synchronization Input
16	CLBL	Video Clamping Pulse / V-Blanking Output

PIN	SYMBOL	DESCRIPTION
17	HUNLOCK	H-Synchronization Unlock/Protection/V-Blanking Output
18	SCL	I^2C-Bus Clock Input
19	SDA	I^2C-Bus Data Input
20	i.c	Internally connected; nite 1
21	VSMOD	Input for EHT Compensation (Via V-Size)
22	VAGC	External Capacitor for V-Amplitude Control
23	VREF	External Resistor for Vertical Oscillator
24	VCAP	External Capacitor for Vertical Oscillator
25	SGND	Signal Ground
26	HPLL1	External Filter for PLL1
27	HBUF	Buffered F/V Voltage Output
28	HREF	Reference Current for Horizontal Oscillator
29	HCAP	External Capacitor for Horizontal Oscillator
30	HPLL 2	External Filter for PLL2 / Soft Start
31	HSMOD	Input for EHT Compensation (Via H-Size)
32	FOCUS	Output for Vertical Focus

BLOCK DIAGRAM FOR TDA4853/4857



TYPE	PARTS	TYPE	PARTS
	2N3904		KTA1275 KTC3206
	KTD1413		IRFS630A
	KTA1270 KTC200-Y KTC3198 KTC3202	 1: GND 2: OUT 3: IN	DTC114E
 1: BASE 2: COLLECTOR 3: EMITTER	KSC5803	 1: EMITTER 2: COLLECTOR 3: BASE	KSD882Y
 1: EMITTER 2: BASE 3: COLLECTOR	KSP44	 1: EMITTER 2: BASE 3: COLLECTOR	KSP92

EB770G / CB777G
SCHEMATIC DIAGRAM 2002.01.11

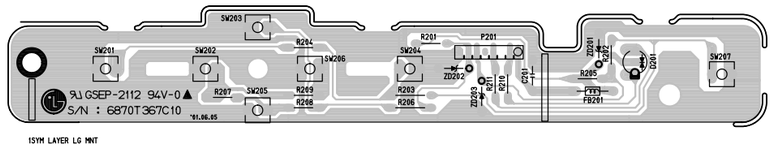
IIC-SDA
IIC-SCL
DDC-SDA
DDC-SCL

IMPORTANT SAFETY NOTICE
THE ⚠ SYMBOL MARK OF THIS SCHEMETIC DIAGRAM INCORPORATES SPECIAL FEATURES IMPORTANT FOR PROTECTION FROM X-RADIATION. FIRE AND ELECTRICAL SHOCK HAZARDS. WHEN SERVICING IT IS ESSENTIAL THAT ONLY MANUFACTURES SPECIFIED PARTS BE USED FOR THE CRITICAL COMPONENTS IN THE ⚠ SYMBOL

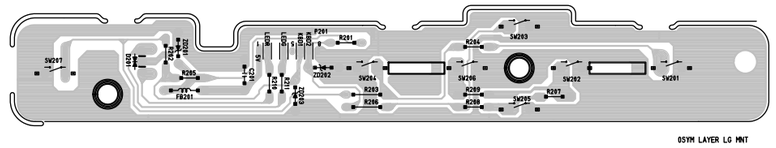
IMPORTANT SAFETY NOTICE
THE ⚠ SYMBOL MARK OF THIS SCHEMETIC DIAGRAM INCORPORATES SPECIAL FEATURES IMPORTANT FOR PROTECTION FROM X-RADIATION. FIRE AND ELECTRICAL SHOCK HAZARDS. WHEN SERVICING IT IS ESSENTIAL THAT ONLY MANUFATURES SPECFIED PARTS BE USED FOR THE CRITICAL COMPONENTS IN THE ⚠ SYMBOL MARK OF THE SCHEMETIC.

PRINTED CIRCUIT BOARD

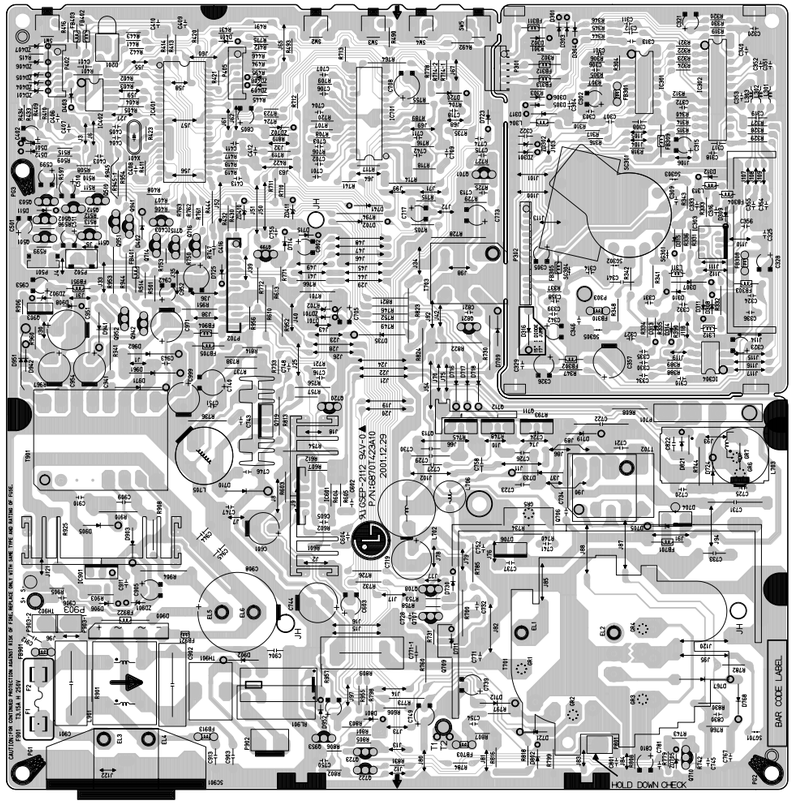
1. CONTROL BOARD (Component Side)



2. CONTROL BOARD (Solder Side)



3. MAIN BOARD (Component Side)



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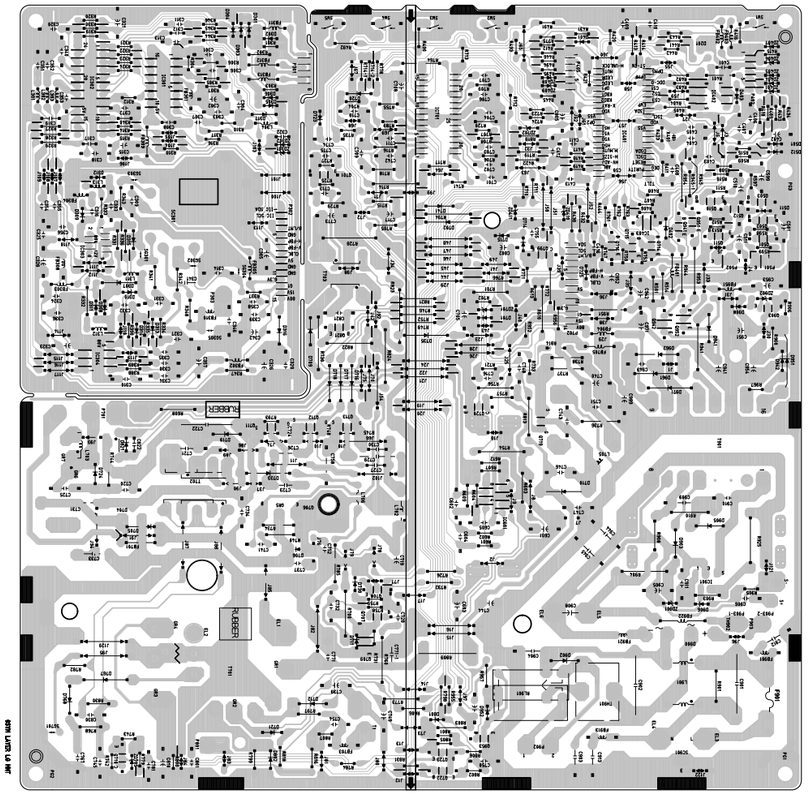

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Jan. 2002
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